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## Education for Self-Reliance and the Inclusion of Manual Work in the Secondary School Curriculum: A Case Study of Six Tanzanian Schools

Peter M. Rutayongororwa  
*Loyola University Chicago*

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EDUCATION FOR SELF-RELIANCE AND THE INCLUSION OF  
MANUAL WORK IN THE SECONDARY SCHOOL CURRICULUM  
A CASE STUDY OF SIX TANZANIAN SCHOOLS

by

Peter M. Rutayongororwa

A Dissertation Submitted to the Faculty of the Graduate School  
of Loyola University of Chicago in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Philosophy

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1987

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## VITA

The author, Peter Mutajuka Rutayongororwa, is the son of the late Domitian Mutajuka and Theresia Kobugara Rutaizibwa. He was born 7 June 1937 in Bukoba, Kagera Region, Tanzania.

His elementary education was completed at Bugandika Catholic Mission School in 1951. His secondary education was obtained at Rubya Seminary where he passed the Overseas Cambridge Examination in 1958.

In January, 1959, he entered Katigondo Senior Seminary, Masaka, Uganda for two years of Philosophy. He was selected in 1962 to pursue theological studies in Rome, Italy. For the period 1962-66 he read theology and related subjects at the Universitas Urbaniana, where he obtained a Licentiate in Sacred Theology (STL).

After returning to Tanzania in 1966, he did pastoral work for one year, taught at Rubya Seminary (Alma Mater) for another year. In 1968, he pursued a B.A. degree with an Education Option at the University of Dar es salaam. Upon graduation in 1971, he taught at Ihungo Secondary School, where he also served as chaplain until 1981. In 1972-73, he was sent by the Ministry of Education to the University of Besancon, France, where he earned a diploma in Methods of Teaching French to Foreign Students.

In September, 1981, Peter Rutayongororwa was admitted at the University of Iowa, Iowa City, where he obtained a Master's Degree in Foundations of Education in 1983. In September of the same year, he transferred to Loyola University of Chicago to

pursue a Doctor of Philosophy degree in Foundations of Education, with a major in Comparative and International Education.

While undertaking his doctoral studies, Peter Rutayongororwa attended conferences on Comparative and International Education at the universities of Houston (1984), Stanford (1985) and Virginia (1987). He also made two research trips to Tanzania in 1984 and 1986. In 1984, he had the honor and privilege of interviewing the then President of Tanzania, Julius K. Nyerere, author of the blue print "Education for Self-Reliance."

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## CHAPTER I

### INTRODUCTION

#### The Statement of Purpose

"There is no place closer to man [sic] than a workshop, and the intelligence of a man is not only in his head, but in his fingers too."<sup>1</sup>

Jacques Maritain, in the above quotation, represents a line of philosophers of education who perceive manual work as a crucial element in the educational process. This insight into the role of physical labor in education has been defended and has thrived throughout the history of education in spite of the dominant view of the Platonic line of educational philosophers, who look down upon manual work and ignore its educational value. These two contending lines of thought, qualified respectively from their Greek origins, as "Promethean" and "Platonic" have generated a perennial debate among educators.<sup>2</sup> Thus, underlying

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<sup>1</sup>John W. Donohue S.J., Work and Education (Chicago: Loyola University Press, 1959), p. 204, quoted from: Jacques Maritain, Education at the Crossroads (New Haven: Yale University Press, 1943).

The writer does not subscribe to the sexist language which may appear in some of the quotations. Therefore, from hereon, "sic" will not be used for the smooth flow of the text.

<sup>2</sup>Prometheus, according to greek legends, was a greek god who stole fire from Zeus and gave it to man, whom he taught many arts and sciences. He is identified as the god of creativity and pragmatism. Promethean education is thus, action-oriented education, as opposed to Platonic education which is general and theory-oriented.

all educational systems is a basic philosophical option, chosen or imposed, conscious or unconscious, for either a Promethean or platonic line of education.

Upon gaining independence (9 December 1961) Tanzania inherited an educational system of the platonic line from the British colonial masters. The years 1961 to 1967 were characterized by the efforts of the government to make adjustments within the received educational system to suit the needs of national development. It was, however, realized that cosmetic reforms were not enough if education was to play a crucial role in the transformation of Tanzanian society as it struggled from "flag independence" to achieve real political, economic, social, and cultural autonomy.

The above realization was triggered by the adoption, in 1967, of a new philosophy of development, Ujamaa na Kujitegemea ("Socialism and Self-reliance"). The Arusha Declaration of 29 January 1967 committed Tanzania to a socialist and self-reliant path of development.<sup>3</sup> As a necessary consequence radical changes had to be made in the educational system. On February 5, 1967, a blue print, "Education for Self-reliance" was promulgated.<sup>4</sup> Among

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<sup>3</sup> For the full text of the Arusha Declaration see Julius K. Nyerere, UJAMAA: Essays on Socialism (Dar es salaam: Oxford University Press, 1968), pp.13-37. Reprint in idem, Uhuru na Ujamaa: Freedom and Socialism (New York:Oxford University Press, 1968), pp.231-250.

<sup>4</sup>For the full text of the document "Education for Self-reliance" see Julius K. Nyerere, Education for Self-Reliance (Dar es salaam: Government Printer, 1967). Reprint in idem, Uhuru na Ujamaa: Freedom and Socialism (New York: Oxford University Press, 1968), pp. 267-290.

the many reforms suggested in this document, urgency was expressed for integrating work and education. In the implementation process response to this need has been in two directions.

In one direction, since April 1967, "self-reliance projects" were introduced in all schools.<sup>5</sup> In a letter sent to all heads of secondary schools in November 1967, the Ministry of Education had this to say regarding these projects:

At this Conference [University of Dar es salaam, 10 April 1967] many suggestions were put forward by which schools could help themselves by initiating projects aimed at making pupils aware of their responsibilities to the community and the nation. Most schools have entered wholeheartedly into these projects and moreover are actively investigating other ways of becoming self-reliant.<sup>6</sup>

In spite of the efforts made in these projects, when they were evaluated in 1971, it was found out that the goals of self-reliance had not been properly understood, and consequently the aim of integrating work and education was far from being realized. Julius K. Nyerere assessed the situation as follows:

The fact is that we have a very long way to go before our educational policy is properly understood and properly applied. . . . We are still trying to graft 'working' on to 'learning', as if the former is an 'extra' being added to education just for the good of our souls. Living, learning,

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From hereon the abbreviation ESR will be used to refer to "Education for Self-reliance."

<sup>5</sup> The term "self-reliance projects," with lower-case letters, is specifically used to refer to manual work projects (food growing, money making and school maintenance) in Tanzanian schools.

<sup>6</sup> Circular: Ministry of Education, Ref. No. EDS/R 6/1/1/1 on "Education for Self-reliance." For full text see Appendix B.

and working cannot be separated.<sup>7</sup>

After this realization, a new approach to "self-reliance projects" was considered imperative so that these manual activities could help students "to live and work as they live, as well as learn," and so that "learning and living" could be seen as "parts of a single process."<sup>8</sup>

This fresh emphasis on the integration of work and education was focus of the Musoma Resolutions of 1974. The abbreviated text of the Musoma Resolutions is given in appendix A. The Resolutions urged the merging of education with production so that schools could contribute to self-sufficiency and could become integrated with the local community. One of these resolutions ordered the establishment of assessment procedures which would draw on work commitment and experience as well as on examinations. Henceforth, manual work was to be part and parcel of the secondary school curriculum and not just an appendage. A target of meeting 25 percent of the catering expenses was set for all secondary schools. The Musoma Resolutions gave a new impetus to the

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<sup>7</sup>Julius K. Nyerere, "Ten Years After Independence," paper submitted to TANU National Conference in September 1971. In idem, Freedom and Development/Uhuru na Maendeleo (Oxford University Press, 1974).

Julius K. Nyerere (1922- ) was President of Tanzania from 1961-1985. He is the author of "Education for Self-reliance" which was adopted by the nation as official policy for educational development in Tanzania. He is popularly referred to as Mwalimu (Teacher) of the nation, a title which depicts him as the conscience of the nation in matters of the philosophy of national development. His views on education are taken seriously.

<sup>8</sup> Ibid.

implementation of the policy of the integration of work and education.<sup>9</sup>

In the other direction of integrating work and education, the policy of diversification/vocationalization of secondary education was adopted in 1971. This policy was another step in moving away from elitist education towards practical education. The aim of the policy was stated as follows:

The policy calls for the provision of special facilities in a number of schools for agriculture, Crafts/Commerce, Home Economics (Domestic Science) and Technical Education. This policy of establishing these special facilities in order to impart a more practical bias to secondary education is also a deliberate attempt to implement the policy of education for self-reliance. It is a preparation for the practicalities of life through practical education.<sup>10</sup>

There were three specific objectives of this vocational secondary education: (1) to give students adequate academic and practical skills for further education/training, (2) to impart to students knowledge and skills for direct wage employment in the public sector, and (3) to prepare students for life by giving them relevant education which would make them productive members in their communities, both rural and urban.<sup>11</sup>

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<sup>9</sup> "TANU Directive on the Implementation of Education for Self-reliance," Proceedings of the National Executive Committee Meeting held at Musoma in November 1974, Papers in Education and Development, No.3 (December 1976): 1-2. Other reprints in African Review 6 (January, 1976): 103-112 and Utafiti 2 (January 1977): 133-45.

<sup>10</sup> Ministry of National Education, Diversification/Vocationalization of Secondary Education, Dar es salaam, 1971 p. 2. (mimeographed).

<sup>11</sup> Faustin Boniface Mukyanuzi, "The Political Economy of Educational Reforms in Tanzania Secondary Education Curriculum and National Development" (Ph.D. dissertation, Stanford



This policy was aggressively put into operation. By mid 1976, Tanzania had diversified its secondary school system as follows. First, there were thirty-one schools with a bias of commercial subjects. One hundred and fourteen teachers had been prepared to teach commercial subjects in these schools. Secondly, there were fourteen public secondary schools with a technical bias. Seventy five percent of the technical subjects in these schools were taught by Tanzanians. Thirdly, thirty-three public schools were agriculturally biased, with a total of 119 specialized teachers in agriculture -- all Tanzanians. With Cuban aid, three new agriculture secondary schools were nearing completion. Lastly, there were seven schools that had a domestic science bias.<sup>12</sup> Two schools, namely, Tabora Boys' and Tabora Girls', deserve special mention here. A unique bias, combining political education, military training and technology, was introduced in these schools in 1971 and 1974 respectively.<sup>13</sup> By 1982, out of the eighty-five public secondary schools in Tanzania mainland, the following percentages applied: 40 percent had an agricultural bias, another 40 percent had a commercial bias, 7 percent had a technical bias and, finally, 6 percent had a home

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University, 1985), p. 145.

<sup>12</sup>For a detailed discussion on the progress of Diversification/Vocationalization of Secondary Education, see Wizara ya Elimu ya Taifa, Ripoti ya Mwaka ya Kurugenzi ya Mipango yote, July 1975-June 1976, Dar es salaam, p. 4-5. (mimeographed).

<sup>13</sup>Simon R.Nkonoki, "The Implementation of Nyerere's Philosophy of Education for Self-reliance in Secondary Schools, 1967-1977," undated paper found in the Department of Development Studies, University of Dar es salaam, p. 4-15.

economics bias. All the home economics schools are exclusively attended by girls.

However, Psacharopoulos and Loxley, who evaluated this innovation in 1984, have indicated several negative results. They state that, functionally, the reform did not ease unemployability for secondary school leavers. They also found that a great percentage of students unselected for various jobs were from these very vocational schools. Moreover, they argue that financially the reform was too expensive, with insignificant results for a poor nation like Tanzania.<sup>14</sup> Mukyanuzi, who has researched the same question, has agreed with Psacharopoulos and Loxley in his observation that vocational students lacked skill-correspondence for their workplace tasks, and that both vocational and non-vocational graduates had the same percentages for direct employment and were not differentially paid. He, however, has indicated positive outcomes concerning the reform. Unlike Psacharopoulos, he found out that the reform made the following contributions: (1) students from diversified secondary schools had a significant advantage over others when selected for further training courses in post Form IV institutions; (2) as far as self-reliance projects are concerned students with vocational skills, especially in agriculturally-biased schools, seemed to contribute higher amounts to the upkeep of schools than

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<sup>14</sup>George Psacharopoulos and William Loxley, (1984), Diversified Secondary Education and Development. A Draft Report prepared for the World Bank, Chapter 7:25-32 and George Psacharopoulos, Planning Education: Where do we stand?, The World Bank Report No. EDT4, (August 1985), pp. 4-5.

those without vocational background; and (3) Mukyanuzi suggests that there are good signs that vocationalization is conducive to the internalization of positive work habits. However, he is not oblivious of the fact that diversification is not a panacea for the problem of integrating work and education. He emphasizes the point that education alone is not capable of bringing about such a transformation. A successful implementation of such an objective would require a global strategy that involves the larger society. Once the social change has been initiated in the larger society, then educational institutions could help to propagate the new change.<sup>15</sup>

Besides a few technical mistakes in the implementation process, the wrong strategy and naive belief that education can do it alone seem to be the basic causes of the relative ineffectiveness of the diversification experiment. In spite of this, the interviews the writer had with significant officials in the Ministry of National Education, indicate that there is still a strong commitment, mutatis mutandis, to continue with the experiment of vocationalization of secondary schools in Tanzania. One important official in the Ministry of Education asserted that the negative assessment by Psacharopoulos was due to an overemphasis on the cost-effectiveness of the experiment which has made the evaluation blind to positive results, cognitive, attitudinal and otherwise, from this policy. For example, in

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<sup>15</sup> Mukyanuzi, "The Political Economy of Educational Reforms in Tanzania." pp. 287-298.

schools where diversification was well implemented, the evaluation of academic and work performance did show that cognitive skills and positive attitudes towards work were enhanced by the new educational approach.<sup>16</sup>

The above was a brief description of two strategies, namely, "self-reliance activities" and "diversification" which are being used to integrate work and education in Tanzanian schools. This study concentrates on the former. The researcher, by developing a case study of six selected secondary schools, sought to discover how the aims of "self-reliance activities" were understood and implemented and what factors affected positively or negatively the effective implementation of the policy. The underlying concern was to try to assess how the implementation of this particular policy affected the general policy of ESR, which is the promotion of "quality education" necessary for national development. The writer was less concerned with the philosophical merits and demerits of the utopian vision of ESR, but rather more with the practice of policy in concrete schools. This was due to the fact that it is increasingly becoming common in Third World countries to have excellent theories on paper while little or nothing happens in practice. In the final analysis, it is not theory as such but practice which makes a difference in peoples'

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<sup>16</sup>The author had an opportunity to individually interview the four directors of the Four-bias secondary schools, and Dr. F.B. Mukyanuzi of the Education Research Unit in the Ministry of National Education. What is reported here is his insightful assessment of what they thought of the vocationalization experiment.

lives. It is imperative to continuously reflect on the practice in order to arrive at a realistic assessment of proclaimed policies and resolutions.

In the effort to thoroughly investigate the topic of the dissertation, the researcher looked into the following questions:

1. How are the aims of self-reliance activities understood in the real school context?
2. To what extent are the declared aims of self-reliance activities being achieved? And, more specifically: (a) how are the projects helping to alleviate government expenditure on secondary education, (b) how is the inclusion of manual work in schools promoting the Ujamaa ethic of work, namely, a positive attitude towards the necessity and dignity of manual work and a rejection of elitist attitudes, (c) how effective are self-reliance activities in merging theory and practice and imparting knowledge and skills appropriate for both rural and urban development, (d) how do these projects help to integrate schools in communities around them?
3. What are the attitudes of teachers, students and parents towards this policy?
4. How favorable is the Tanzanian politico-economy to the successful implementation of the policy?

### The Significance of the Study

This study is significant for several reasons. First, whereas many studies have been conducted in order to examine either the philosophical rationale of ESR or the general implementation of ESR, this study will attempt to focus on one aspect of the implementation of ESR, namely, the making of manual work an integral part of the secondary school curriculum. This study will reveal how effectively this is being implemented and how the implementation is affecting the quality of secondary education. Secondly, whereas other researchers have focused their attention mainly on the economic contribution of self-reliance activities or their occupational value, this study, without neglecting other aspects, will pay more attention to the school community's attitudes regarding manual work activities and the perceptions of educational value of these projects. Since teacher and student commitment is crucial to the successful implementation of the policy, this study will assess some of the strengths and weaknesses in the "grassroot" implementation of the policy.

Another significant aspect of this study is its methodological approach. Whereas most of the studies of the topic have used quantitative methods to investigate the Tanzanian school reality, in this study, the researcher has deliberately focused his attention on a limited number of secondary schools and their surrounding communities in order to get a better insight into the

complex reality of schooling.<sup>17</sup> By a careful combination of participant-observation, interviews, questionnaires and documentary information, this study will portray a revealing picture of the schools studied, which mutatis mutandis, could be applied to other schools in Tanzania.

Fourthly, the significance of this study stems from its timing. This research was conducted during a time which could be referred to as the "period of disillusionment." As of the mid 1980s, the period of the romantic idea of "revolution through education" and the concomitant praise-oriented research has been superseded by a period of ardent desire among researchers and all those interested in Tanzanian education to face squarely the limitations of schools in realizing the noble goals of ESR. Stimulated by a widespread popular dissatisfaction about the current state of education, researchers are directing their efforts to finding out what can be done in order to improve the quality of education. Due to this changed research atmosphere, the writer was greatly impressed by the openness and candidness of views that were expressed both within and without the school environment. By incorporating these views, this study will add to the body of knowledge of the problem under study.

Lastly but not least, this study is significant because of the relevance of the Tanzanian experience to other Third World countries. Since the Tanzanian experience of trying to restore

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<sup>17</sup>Only six secondary schools were researched in depth by the author.

the educational value of manual work in schools is of special interest to countries in transition from colonial-peripheral to alternative, integrated and relevant systems of education, the strengths and weaknesses of Tanzania's attempt, to be highlighted by this study, will be valuable to all those interested in innovative educational approaches in the Third World.

### A Clarification of Key Terms

Since language has an aspect of arbitrariness, it is imperative to clarify the meaning of pivotal terms that are going to be used in this study. This will be a safeguard against confusion, especially for readers who are not familiar with the Tanzanian system of education.

Manual Work. Before defining what will be understood as "manual work" in the context of this study, it is imperative to shed some light on the complexity of this key concept of work as discussed by three selected scholars, namely, F. E. Sparshott, Hannah Arendt and Thomas F. Green.

Sparshott points out that there are three views of work: the Aristotelian, the Pauline and the Materialist.<sup>18</sup> According to Aristotle, the word "work" comes from the Greek word ergon which means function. Just as a machine exhibits its nature by doing its specific operation, in the same manner human beings by working fulfill themselves. For a human being, to work is to

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<sup>18</sup>F. E. Sparshott, "Work: The Concept, Past, Present and Future," Journal of Aesthetic Education 7 (October 1973): 23-38.



exemplify, complete and perfect humanity, that is, to live in the light of a general ideal for humanity exercising rationality. Since Aristotle's ethics assumes the standpoint of the rich, it does not regard the satisfying of economic need as properly the work of a human person, but merely as a precondition for that work. The argument behind it is that a human being wholly preoccupied with labor for economic survival might as well not be human since feeding oneself is something that every animal does. In short, for Aristotle what is properly regarded as work is intellectual and not physical activity. This is the philosophical foundation of elitist negative attitudes towards manual work.

The Pauline view of work is expressed in his [Paul's] admonition to the Thessalonians: "If a man does not work, neither shall he eat" (2 Thess.3:30). This statement echoes the curse on Adam: "In the sweat of thy brow, shalt thou eat bread." The Greek word for work as used in this context is ergazomai which connotes manual labor and specifically animal husbandry. This view differs from the Aristotelian exalted view of work in that work, according to this view, is seen as a necessary evil for survival and hence the notion of work as toil and labor.

Thirdly, Sparshott points out that during the industrial age, the notion of work as necessary toil underwent a further redefinition. In this new development, to work is to be in work, to be employed, that is, to be utilized, reduced to the status of an instrument in the process of the transformation of matter.

According to this materialist philosophy, work is the transformation of matter and it has no other value except the material value of the manufactured article.

Arendt, on her part, distinguishes between the original meaning of work and the transformed meaning of work under industrialism.<sup>19</sup> According to the original meaning, there are three types of human activities, namely: labor, work, and action/speech. Labor is a type of activity that human beings along with other animals engage in so as to reproduce their individual physical lives as well as the life of the human species. This type is a subsistence or survival activity. It is a matter of life and death rather than of voluntary choice. Examples of this category of human activity include any activity engaged in producing food for consumption such as farming, hunting, and gathering.

On the other hand, "work" is activity that is voluntary. It presupposes and goes beyond the mere satisfaction of subsistence or physical survival necessities or needs. A good example of this type of activity is craftsmanship, which involves both the designing and fabricating of the world of man-made objects. In this sense, work is essentially creative, ordering and productive.

The third type of activity, according to Arendt, is "action," which is inseparable from speech and thinking. Action

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<sup>19</sup>Hannah Arendt, The Human Condition (University of Chicago: University of Chicago Press, 1958), pp. 124-198.

differs from labor in that it does not involve getting something out of nature for consumption. It also differs from work in as much as it does not involve transforming nature into man-made objects. The products of action, namely, deeds, words and thoughts are intangible compared to those of labor and work. Arendt sees labor as "reproductive work," work as "productive work" and action as "socio-political work." Further, she comments that since the arrival of industrialism the concept of work has undergone a complete transformation. Work has been reduced to a marketable commodity at the disposal of Capitalists for profit maximization. Under industrialism, once workers have sold work or labor power to the capitalist, they become alienated in the sense that the employer has no real commitment to ensuring that the work activity should also be meaningful to the employee by developing his or her powers as a person.

Green makes a simple distinction between labor and work.<sup>20</sup> In order to clarify the concept of labor, he suggests the image of a single human person struggling to wrest his food from the earth by hunting, gathering or tilling the land. To the extent that human energies are expended in order to provide for the needs of consumption, the human being is simply one among the animals who labor. He mentions two interconnected essential features of labor, namely, necessity and futility. He describes these features as follows:

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<sup>20</sup>Thomas F. Green, Leisure and the American Schools (Syracuse University, 1968), pp. 19-26.

Whatever is produced by labor is produced to be consumed, not to be put to use. The activity of labor so conceived does not aim at the creation of some durable addition to the world. It does not aim at the production of some stable thing that would add to the material objects with which men surround themselves or to the tangible and social relations by which their lives are contained. It seeks not to add to life, but merely to sustain it. . . . from which it follows that labor is endless. Once done, it is always undone. . . . In that sense labor is in principle never finished, it never reaches a point of completion, never comes to an end. In one sense, it is the expenditure of energies in futility. Nevertheless it is done out of necessity: having eaten, we must eat again; having cut the grass, we shall have to cut it again.<sup>21</sup>

The understanding of labor in this way sheds some light on why labor has always been looked down upon through the ages. The ancients thought that "a man can be free and therefore human (agathos) only to the extent that labor has been banished from his life."<sup>22</sup> The ancients attributed intrinsic futility to all labor activities, fit only for slaves and those under punishment. Thus in Greek Mythology, Sisyphus, for disobedience to the gods, as maximum punishment, was condemned to an eternity of labor, i.e., to push a rock up to the top of a hill from which it would then roll down so that he had to push it once again to the summit.

For the concept of work, Green suggests the image of homo faber, that is, a human being as an artisan and in particular as an artist. He uses linguistic analysis to show the distinction between work and labor. In ordinary language we say: "he performed labor," and "he produced work." While labor is a task

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<sup>21</sup> Ibid., p. 19.

<sup>22</sup> Ibid., p. 20.

word, referring to an unfinished product of an activity, work is an achievement word that refers to some finished object. Thus work is an activity that in principle is aimed at the production of some persisting object. Work, unlike labor, is capable of termination. It is the sort of activity that is conceived of as having a point of completion and is unlike labor which is endless, cyclical and futile.<sup>23</sup> It is obvious that Green's conceptualization of labor would be conducive to a negative and low regard of activities labeled as such.

The above brief survey of the complex and controversial conceptualizations of work and labor, makes it imperative to clarify the parameters within which the discussion on manual work in this study will take place. For this purpose, four precautions are hereby suggested.

First, the various distinctions such as work and labor, mental work and physical labor, academic and manual work, skilled and unskilled labor and so forth, are important and sometimes necessary for the understanding of the various aspects of human activities. Indeed, work covers a vast variety of human activities which may be highlighted by such distinctions. Secondly, one should however, avoid the strong temptation to attribute an evaluative content to these distinctions. It is not true that the distinction between intellectual work and manual labor or work implies that manual work or labor as a human activity is of lower status than intellectual or academic work.

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<sup>23</sup> Ibid., p. 21.

Despite cultural conditioning, these distinctions per se do not set standards of determining the human value of different human activities. The fundamental principle in evaluating human activity is that it is the human person that bestows dignity on work or labor and not vice versa.

Thirdly, it is the writer's view that the idea of alienation of work with the advent of industrialism has been exaggerated especially in the Marxist literature. The situation is not irredeemable. Indeed, despite the odds, human activity, properly speaking, be it labor, work or action, remains an individual's "principal means for not only overcoming and transcending limits on his freedom by the environment, but also for expressing and thereby bringing about the development of his powers as a person."<sup>24</sup> This writer does not adhere to the overly deterministic idea of total dehumanization of human labor under industrialism. The human agent still has the power to restore meaningfulness to his human activities by a conscious involvement that makes him part of his creative work in industry or in services to the community. Imagine what a difference it would make for a mother who adds the quality of love to the so-called alienating domestic chores, or an industrial worker who conscientiously strives to bring justice at the work place.

Fourthly, for the purpose of this study, the terms "manual work," "manual labor," "productive work," "productive labor" and "self-reliance activities" will be used interchangeably. The

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<sup>24</sup> Ibid., p. 26.

important distinction to be recognized is between academic and manual work or labor. The dichotomy between manual and intellectual work is avoided as it may imply that one need not use his or her brain in manual work. Although productive labor, in the wider sense of the word, may include all educational activities of a practical nature, such as music composition and poetry writing, in this study this term is used in a restricted sense to refer to manual work projects in schools. Thus the category of manual work will cover all extra-classroom physical activities (excluding play) which have been traditionally regarded as extra-curricular and hence having nothing or very little to do with the essence of formal secondary education. More concretely this will include activities such as gardening, farming, animal husbandry, home-craft, masonry, metal craft, wood craft, tidying-up and maintenance of school surroundings and buildings. These activities are perceived as being not merely instrumental to economic gain, but more importantly as an integral part of ideal education, which provides young people with practical experience of manual work and an understanding of its nature and dignity.

Tanzania. Located in eastern part of the African continent (see Figure 1 - Map of Africa), the United Republic of Tanzania is comprised of the mainland Tanganyika and the island of Zanzibar (see Figure 2 - Map of Tanzania).<sup>25</sup> It covers the area of 942,623 square kilometres (including islands of Zanzibar and

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<sup>25</sup> Maps and charts are found at the end of the chapter.

pemba, 2,642 square kilometres). It is more than twice the state of California, U.S.A. The population as of July 1986 was 22,415,00 and the growth rate is estimated to be 3.2 per cent. In this study, Tanzania will refer to only the mainland. Zanzibar has a different education system both at the primary and secondary levels with its own policies and administration. At the university level, the education system is the same for both mainland Tanzania and Zanzibar.

There are over 120 ethnic groups (see Figure 3). Tanzania mainland is divided into twenty administrative regions, namely, Arusha, Dar es salaam, Dodoma, Iringa, Kagera, Kigoma, Kilimanjaro, Lindi, Mara, Mbeya, Morogoro, Mtwara, Mwanza, Pwani (Coast), Rukwa, Ruvuma, Shinyanga, Singida, Tabora and Tanga. The field work for this study was conducted in Kagera Region on the west side of Lake Victoria.

Ujamaa. This word literally means "familyhood" in Kiswahili. In describing Tanzanian socialism, it emphasizes the "Africanness" of the development policies and the interdependence of Tanzanian people in their struggle for development. Nyerere clearly states why he chose to use this term in these words:

By the use of the word "Ujamaa", therefore, we state that for us socialism involves building on the foundations of our past, and building also to our own design. . . . We are not importing a foreign ideology into Tanzania.<sup>26</sup>

Self-reliance. In the context of Tanzanian socialism this term does not in any way suggest "self-sufficiency." It simply

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<sup>26</sup> Julius K. Nyerere, Nyerere on Socialism (Dar es salaam: Oxford University Press, 1975), p. 28.



means that the duty to effect national development lies with the Tanzanians themselves. Aid should be sought only after maximizing local resources and should be for augmenting rather than replacing local efforts. Thus education for self-reliance should be a deliberate process of liberating Tanzanians from the mental and physical stranglehold that is responsible for underdevelopment. Students should be educated to learn the meaning of living and working together for the good of all. The educated should never forget that they are an integral part of the nation and that they have a responsibility to contribute more to society because of the educational privilege they have received, thanks to the sacrifices of peasants and workers.

Stages in Tanzanian System of Education (see Figure 4 - The Structure of Education in Mainland Tanzania).<sup>27</sup> Primary Education is of seven years' duration. At the end of the seventh year, there is a Primary School Leaving Examination which selects about 2.6 percent of those completing Standard VII to continue with secondary education. After four years of secondary education, students sit for the National Form Four Examinations, which are equivalent to the East African Certificate of Education or the British O-Level Examinations. About 15 percent of Form Four Candidates are selected on the basis of their performance to continue with Advanced Secondary Education (Forms Five and Six). At the end of Form Six, students sit for Form Six Examinations

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<sup>27</sup>For a more detailed picture of the educational system, see Appendix N, Fig. 16.

which are equivalent to the East African Higher Certificate of Education or the British A-Level Examinations. Success in these examinations qualifies one to apply for university education. In selections both to Form Five and to University, students attitudes and commitment to work and national development are seriously taken into account. This study focuses on secondary education.

Ministry of Education (see Figure 5). After independence in 1961, the Ministry of Education was renamed Ministry of National Education, with a conscious purpose of emphasizing its function to provide education for the youth and adults in the entire nation and thus gradually integrating formal and nonformal educational systems. However, following the recommendation of the Presidential Commission on Education of 1982, the title "Ministry of Education" has been restored.<sup>28</sup> For more factual information in regard to education in Tanzania, refer to Appendix N.

TANU. This acronym stands for Tanganyika African National Union. This was a mass political party through which Tanzania won its independence in 1961. Since 1977 this name has been replaced by CCM (Chama cha Mapinduzi -- The Revolutionary Party).

The Arusha Declaration. Arusha is a town in northern Tanzania (see Figure 2), where in February 1967, the ruling political party unanimously adopted the transformation policy of

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<sup>28</sup>For the restoration of the title "Ministry of Education," see United Republic of Tanzania, Educational System in Tanzania Towards the Year 2000: Recommendations of the 1982 Presidential Commission on Education as Approved by the Party and the Government (Dar es Salaam: Ministry of Education, 1984), p. 40.

Ujamaa policy, that is, socialism, Tanzanian-style.

Musoma Resolutions. Musoma is a town on the north-east of Lake Victoria (see Figure 2). It was here where resolutions to reinforce the philosophy of Education for Self-reliance, particularly the integration of work and education, were adopted by the ruling party in November 1974.

Uzalishaji Mali. This Kiswahili phrase meaning "production of wealth" underscores a recently introduced emphasis in self-reliance activities. As of 1980 all secondary schools in Tanzania were instructed to include ten periods per week of school timetable, that is about four and half hours, for productive manual labor in order to raise the school income.

Curriculum. In the Tanzanian context, this term includes not only classroom study courses, but also manual work projects, play and sports and all programs and efforts designed to integrate the school with the community around. Hence, the idea of an integrated curriculum. Time allocation for different subject areas and the curriculum biases in the secondary level is shown in Figures 6-10.

### Organization of the Study

Chapter I presents the status questionis - - a statement of the problem under investigation. It also includes the significance of the study, clarification of key terms and a summary of the organization of the study.

Chapter II provides a historical context of the problem

under investigation. The role of manual work in education and steps taken to educate the young in this regard are traced through the different periods of Tanzanian educational development: the precolonial, colonial and post-colonial. For the period from 1967 to 1986, special attention is paid to efforts and activities to enhance the role of manual work in education at the secondary level.

Chapter III deals mainly with the review of related literature. First, the theoretical perspectives of manual work in education are discussed. Then, attempt is made to provide the reader with as wide a spectrum, as possible, of views by different researchers both national and international, regarding the issue under study. At the end of the chapter, a summary is provided in which the author suggests the approach of this study.

Chapter IV deals with two important questions regarding methodology. First, the theoretical framework of the study is given regarding the nature of truth in educational research, the world view of society, the role of education in society and various strategies of implementing educational reforms. In the second part of the chapter, the details of the design and procedures of this study are described. At the end, the investigator mentions difficulties and limitations of the study.

Chapter V is a presentation of the quantitative findings of the study. It begins with the statement of the working research hypotheses. Then, exposition is made of findings regarding each hypothesis. Comments are made on the statistical messages for

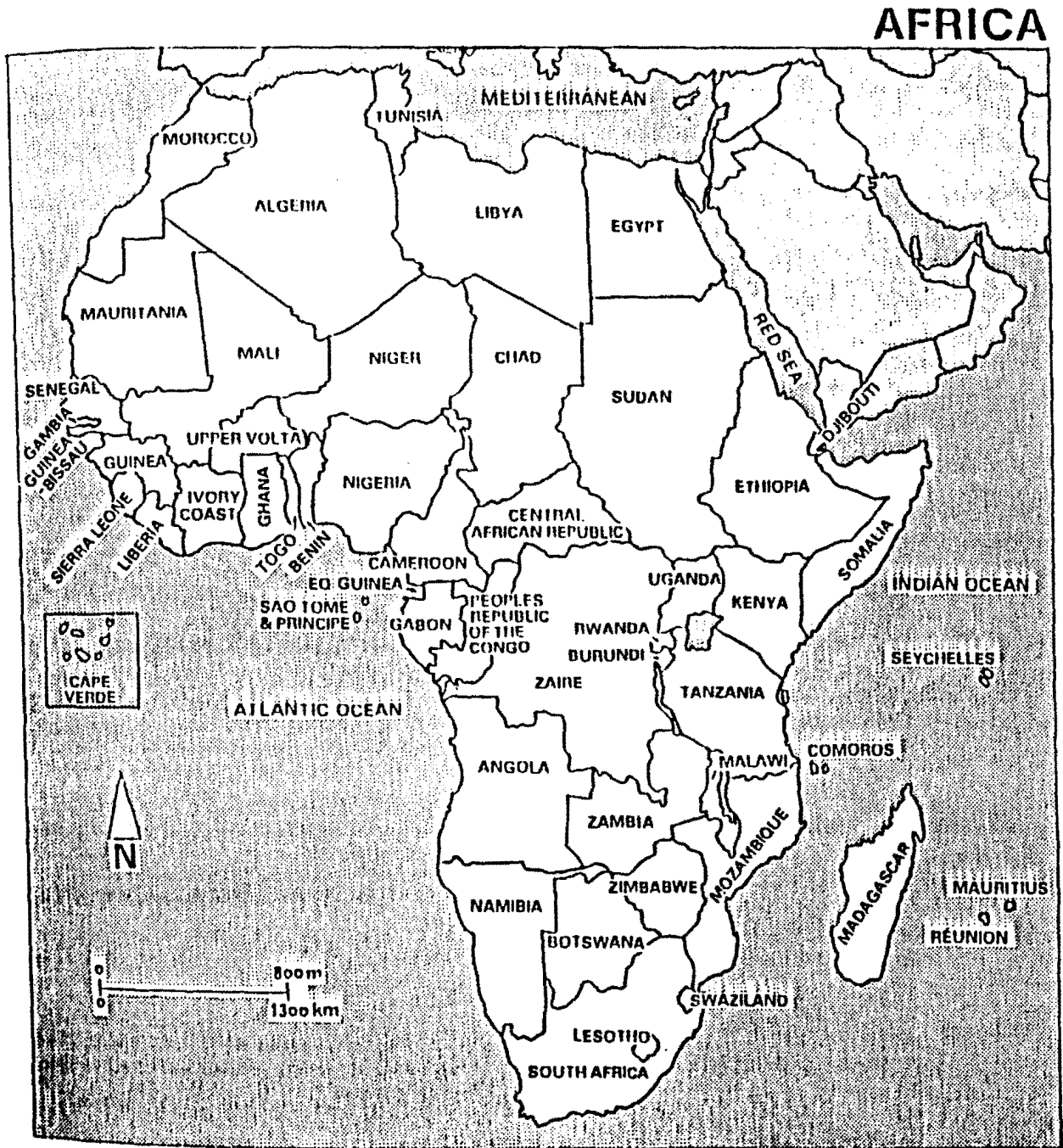
each hypothesis and a summary is given at the end.

Chapter VI presents the qualitative findings of the study. The data is organized in three major groups relating to aims of the reform as understood and implemented, the factors affecting implementation and key issues relevant to the reform. A brief discussion is incorporated in this presentation and attempt is made to relate these findings to those of Chapter V.

Chapter VII provides an overall summary discussion of the findings of the study. It includes a proposal of some implications for implementation and suggestions for further research. The chapter concludes with an appeal to policy makers and educational planners to go beyond political and ideological romanticism in order to deal with real problems uncovered by this study.

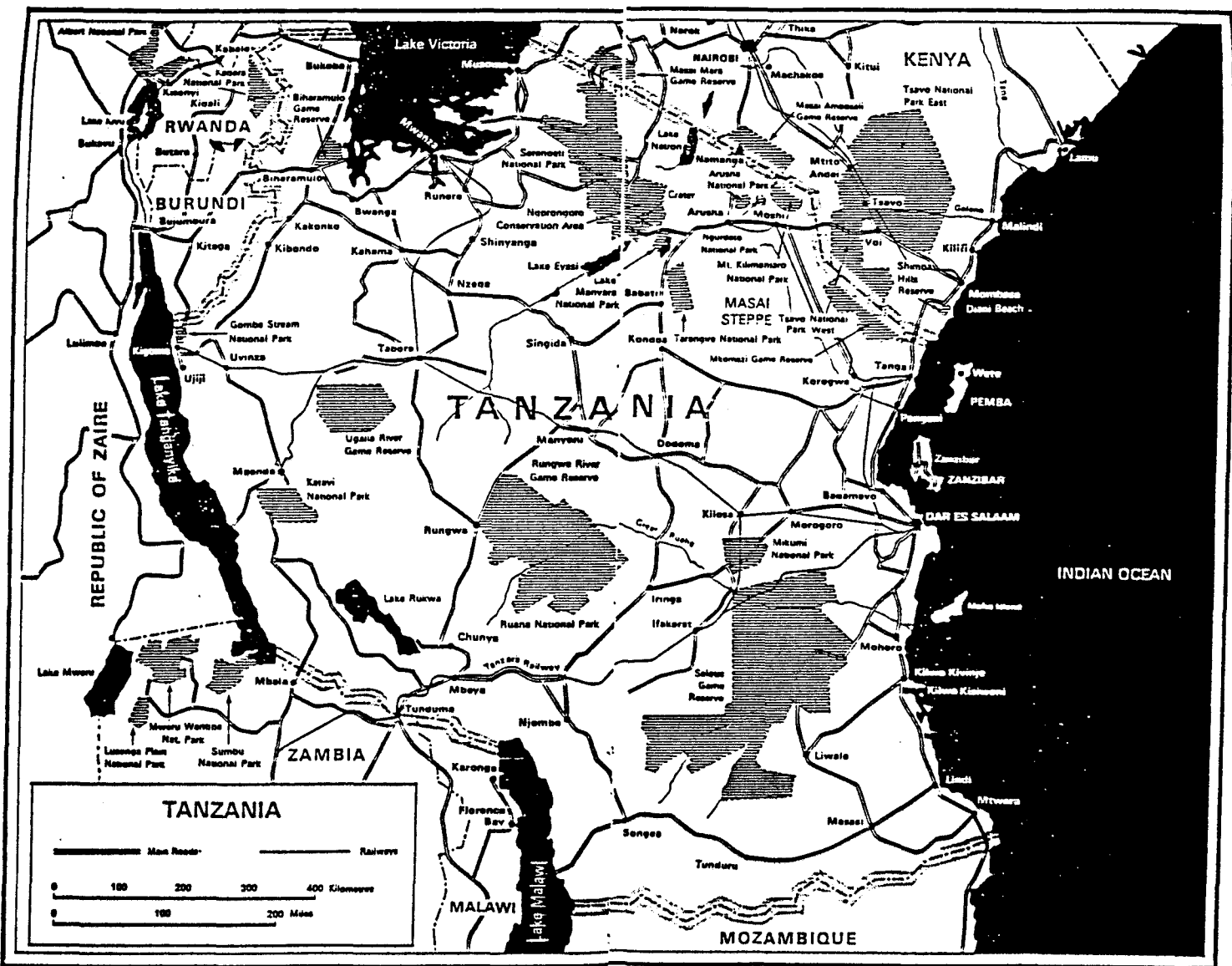
Fig. 1. Map of Africa

Fig. 1. Map of Africa



Source: Maps on File (New York: Facts on File, 1981), p. 1.000

Fig. 2. Map of Tanzania



Source: Thornton Cox, *Travellers Guide to East Africa* (London: Thornton Cox Ltd., 1980), pp. 156-57.



Fig. 3. *Ethnic Composition of African Population by Language Group, 1967<sup>1</sup>*

Ethnic	Number	Ethnic	Number	Ethnic	Number
<b>Bantu Speakers</b>		<b>Makua</b> .....	161,689	<b>Shashi</b> .....	14,951
Ankole .....	3,674	Malila .....	28,895	Shirazi .....	17,384 <sup>2</sup>
Bajuni .....	1,866	Manyema ...	21,895	Soga .....	923
Baluliya ....	4,001	Mambwe ....	13,991	Sonjo .....	12,418
Bena (2.1) <sup>3</sup> ..	251,919	Matengo ....	96,246	Sulba .....	16,123
Bende .....	8,269	Matumbi ....	60,583	Sulhi .....	51,291
Bondel .....	47,911	Mawla .....	20,830	Sukuma(12.9)	1,529,917
Chaga (3.7) ..	410,239	Mbugwe ....	4,280	Sumbwa ....	91,935
Digo .....	40,104	Mbunga ....	10,957	Swahili .....	7,721
Doe .....	13,869	Meru .....	51,729	Taita .....	4,926
Fipa .....	162,369	Mwera <sup>4</sup> .....	185,121	Taturu .....	16,618
Ganda .....	9,664	Nata .....	7,336	Tongwe .....	12,851
Gogo (3.0) ..	360,131	Ndali .....	85,003	Turu (2.1) ...	216,317
Ila (3.2) ....	383,021	Ndamba ....	32,748	Tuzi .....	23,002
Ilangaza ....	51,612	Ndendeule ..	44,783	Twa .....	1,321
Ilaya (3.5) ..	412,356	Ndengereko ..	67,817	Vidunda ....	19,585
Ilehe (3.0) ..	360,686	Ndonde ....	17,653	Vinza .....	6,898
Ilohololo ....	10,931	Ngindo .....	113,193	Wanji .....	33,269
Ikizu .....	10,229	Ngoni .....	104,790	Wemba .....	12,932
Ikoma .....	8,568	Ngurulini ...	20,863	Wungu .....	17,487
Iramba .....	193,932	Nguu .....	64,980	Yao (1.7) ....	204,399
Irambi .....	1,208	Nyamwanga ..	44,383	Zanaki .....	35,430
Isanzu .....	20,355	Nyakyusa (2.6)	306,786	Zaramo (1.9)	227,741
Isenye .....	9,235	Nyamwezi(3.4)	405,976	Zigua .....	185,595
Jiji .....	14,957	Nyasa .....	62,733	Zinza .....	52,723
Jita .....	149,766	Nyika <sup>5</sup> .....	83,005		
Kamba .....	25,271	Nyika <sup>6</sup> .....	37,571	<b>Nilotic Speakers</b>	
Kaguru .....	113,831	Pangwa .....	100,191	Luo .....	134,619
Karanga ....	2,861	Pare .....	182,887	<b>Paranilotic Speakers</b>	
Kerewe .....	54,922	Plimbwe ....	13,773	Arusha .....	89,934
Kikuyu .....	8,249	Pogoro .....	91,688	Barabalg ....	35,826 <sup>7</sup>
Kimbu .....	30,760	Rangl .....	105,200	Dorobo .....	858
Kinga .....	95,553	Regi .....	41,703	Kwavi .....	7,037
Kisi .....	12,707	Rongo .....	49,087	Masai .....	79,619
Kisii .....	2,215	Ruanda .....	47,167	Sabaot .....	194
Konongo ....	26,759	Rufiji .....	77,966	<b>Cushitic Speakers</b>	
Kuria .....	123,488	Rundi .....	114,605	Burungi ....	10,607
Kutu .....	22,922	Rungu .....	20,437	Gorowa .....	18,396
Kwaya .....	23,584	Rungwa ....	7,144	Iraqw .....	198,560
Kwere .....	48,132	Safwa .....	80,416	Mbugu .....	12,555
Lambia .....	11,817	Sagara .....	38,056	Wasi .....	15,746
Luguru (2.2)	257,443	Sangu .....	39,563	<b>Khoisan Speakers</b>	
Machinga ...	20,201	Segeju .....	18,688	Hadzapi ....	180
Makonde (4.0)	476,135	Shamhaa (2.3)	271,536	Sandawe ....	30,000

<sup>1</sup> The figures were established by census takers who asked only heads of households and then listed the entire household as belonging to the ethnic group of the head. This is not always true. In towns, for example, immigrant men often live with local women.

<sup>2</sup> Percentage of the total population given in this table only for the fifteen largest groups.

<sup>3</sup> Includes 3,420 Mwera south of the core area.

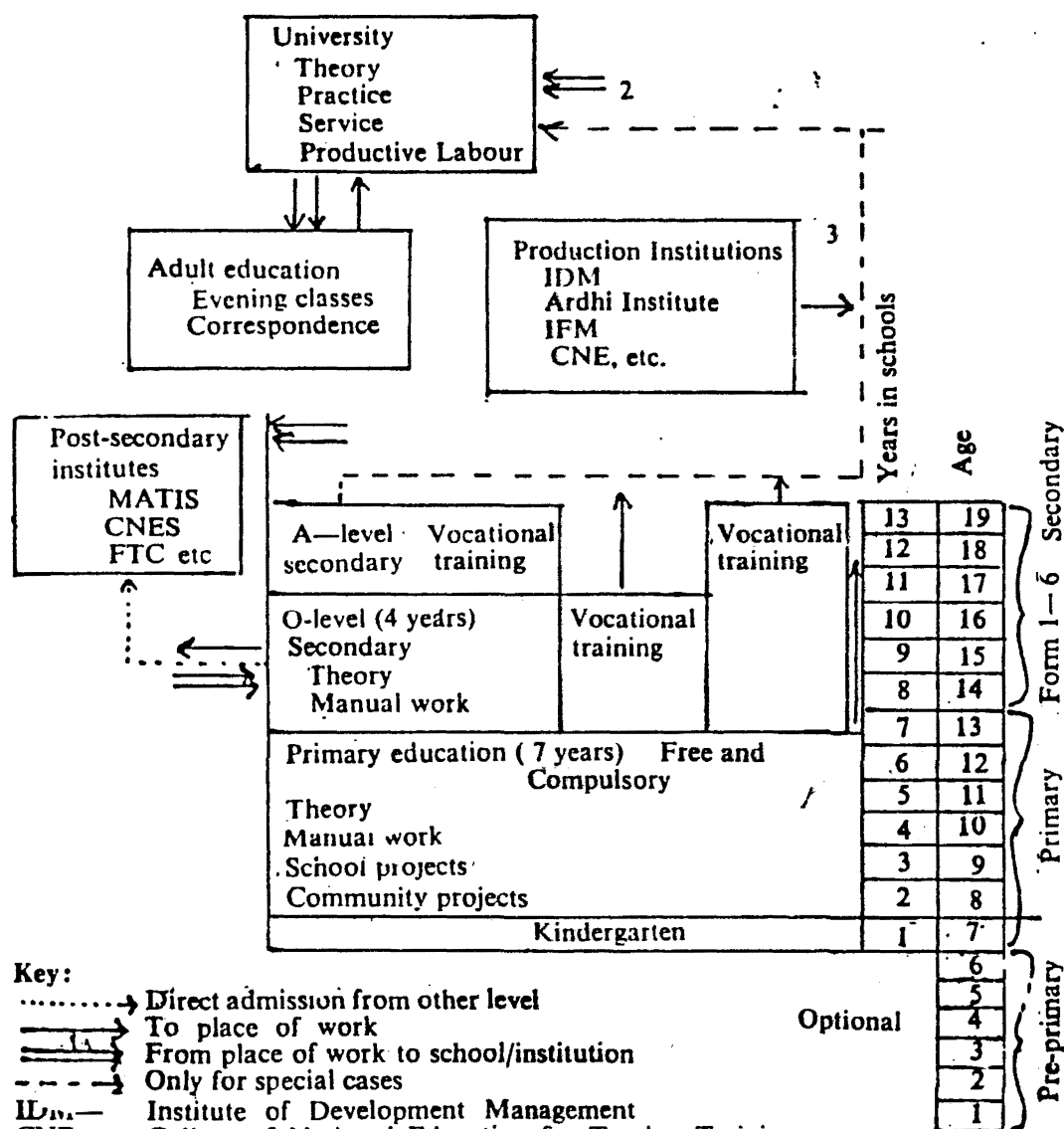
<sup>4</sup> Includes 3,497 Nyika of the Tanzania Region who are probably not related to the Nyika of Mthya.

<sup>5</sup> Includes 894 persons who identified themselves as Hadimu and 1,497 who identified themselves as Tumhott.

<sup>6</sup> Includes the Tutsi.

Source: *Tanzania: A Country Study* (Washington, D.C.: The American University, Foreign Area Studies, 1978), p. 275.

Fig. 4. The Struture of Education in Mainland Tanzania

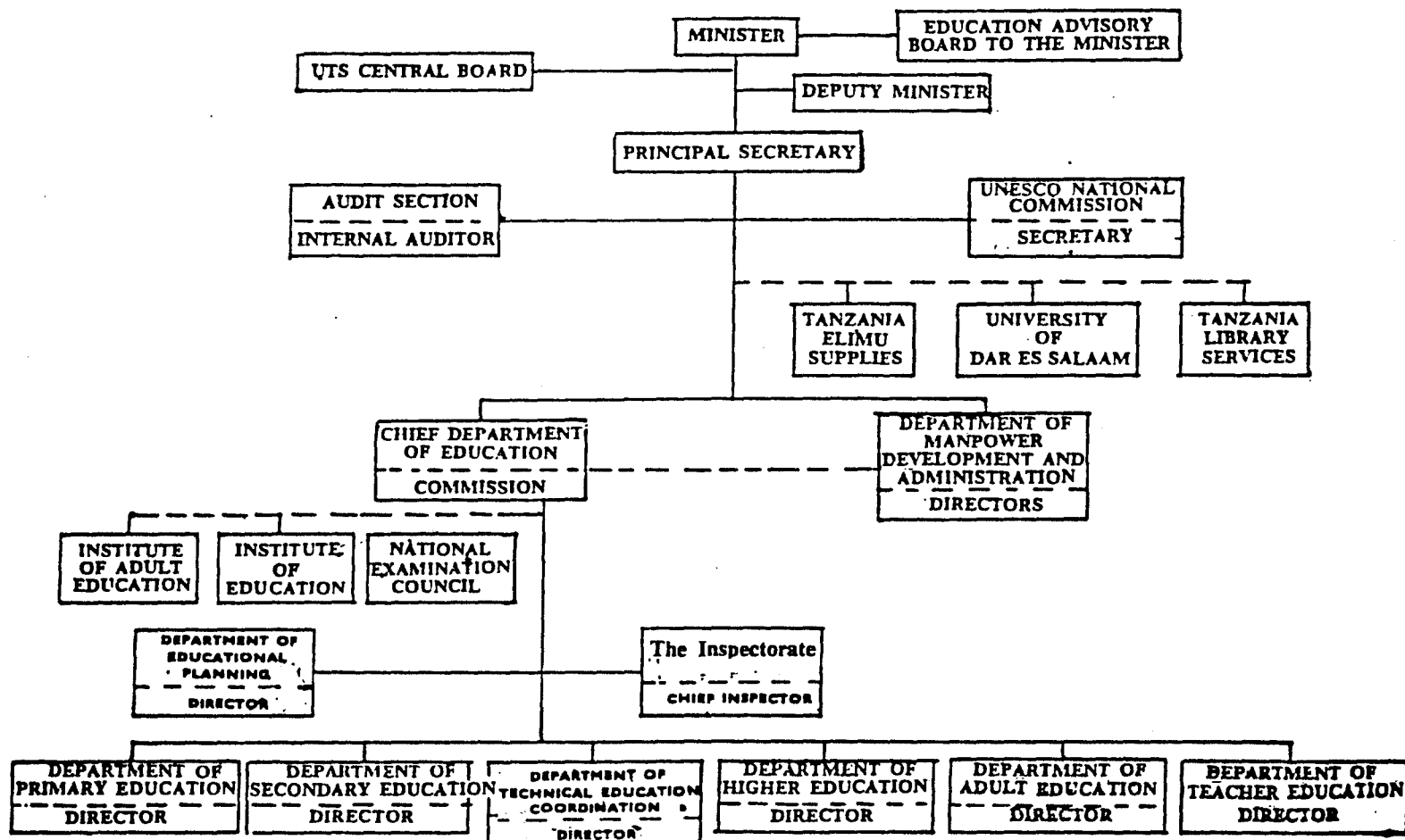


\*(From G. Mmari, Directive on Implementation of Education for Self-Reliance: Work as Part of Study in all Schools, P. 20, 1975)

Source: URT, Basic Facts About Education in Tanzania (Dar es salaam: Ministry of Education, 1984), p. 41.

Fig. 5. Major Sections of Administrative Structure

MINISTRY OF EDUCATION—TANZANIA



Source: Ibid., p. 42

Fig. 7. Agricultural Bias for forms 3 and 4

GROUP	SUBJECTS	PERIODS
COMPULSORY SUBJECTS	Agricultural Science	10
	Political Education	2
	Kiswahili	3
	English	5
	Mathematics	6
	Chemistry	4
	Biology	4
	Religion	2
Total number of periods per week		36
OPTIONAL SUBJECTS	Additional Mathematics	4
	Physics	4
	Geography	3
	History	3
	Home Economics	4
	Foreign Languages	3
	Art	3
	Music	3
	Physical Education	3
SELF RELIANCE PROJECTS		10 hrs
GAMES AND SPORTS		2 hrs

The number of pupils taking Physics should not be below 70 per cent of the total number of pupils in a form.

Fig. 6. Subjects and Periods for Form I - 2

SUBJECTS	GROUP	SUBJECTS, PERIODS AND BIASES			
		AGRICULTURE	HOME ECONOMICS	COMMERCE	TECHNICAL
COMPULSORY SUBJECTS	Political Education	2	2	2	2
	Kiswahili	3	3	3	3
	English	5	5	5	5
	Mathematics	6	6	6	6
	Biology/Health Science	3	3	3	3
	Geography	3	3	3	3
	History	2	2	2	2
	Chemistry	3	3	3	3
	Physics	3	3	3	3
	Religion	2	2	2	2
	Home Economics*	-	8	-	-
	Agricultural Science	8	-	8	-
	Commerce	-	-	-	-
	Technical Subjects	-	-	-	12
Total number of Periods per week		40	40	40	44
OPTIONAL SUBJECTS	Physical Education	3	3	3	3
	Foreign Languages	3	3	3	3
	Music	3	3	3	3
	Art/Woodwork/Metal Work etc.	3	3	3	3
	Home Economics*	3	3	3	3
SELF RELIANCE PROJECTS		10	10	10	10
GAMES & SPORTS		2	2	2	2

\*Home Economics is compulsory to girls in forms 1 and 2 but optional to boys.

Fig. 9. Home Economics Bias for forms 3 and 4

GROUP	SUBJECTS	PERIODS
COMPULSORY SUBJECTS	Home Economics	10
	Political Education	2
	Kiswahili	3
	English	5
	Mathematics	6
	Chemistry	4
	Biology	4
	Religion	2
Total number of Periods per week		56
OPTIONAL SUBJECTS	Additional Mathematics	4
	Physics	4
	Geography	3
	History	3
	Foreign Language	3
	Art	3
	Music	3
	Physical Education	3
SELF RELIANCE PROJECTS		10 hrs
GAMES AND SPORTS		2 hrs

Fig. 8. Commercial Bias for form 3 and 4

GROUP	SUBJECTS	PERIODS
COMPULSORY SUBJECTS	Commercial Subjects	14
	Political Education	2
	Kiswahili	3
	English	5
	Mathematics	6
	Geography	3
	Biology	4
	Religion	2
Total number of Periods per week		59
OPTIONAL SUBJECTS	Additional Maths	4
	Physics	4
	Chemistry	4
	History	3
	Home Economics	3
	Foreign Languages	3
	Music	3
	Art	3
	Physical Education	3
SELF RELIANCE ACTIVITIES		10 hrs
GAMES AND SPORTS		2 hrs

70 per cent of the pupils should  
take Physics and Chemistry.

Fig. 10. Technical Bias for forms 3 and 4

GROUP	SUBJECTS	PERIODS
COMPULSORY SUBJECTS	Technical Subjects	19
	Political Education	2
	Kiswahili	3
	English	5
	Mathematics	6
	Physics/Engineering Science	4
	Chemistry	4
	Religion	2
Total number of Periods per week		45
OPTIONAL SUBJECTS	Biology	4
	Art	3
	Music	3
	Physical Education	3
SELF RELIANCE PROJECTS		8 hrs
PHYSICAL EDUCATION		2 hrs

Source: Ibid., p. 58.

## CHAPTER II

### HISTORICAL CONTEXT OF THE PROBLEM

This chapter attempts to provide a brief history of the role of and attitudes toward manual work in Tanzanian education since precolonial days to the present. For practical purposes, this long period will be divided into precolonial, colonial (1885-1961), pre-ESR (1961-1967), pre-Musoma Resolutions (1967-1974) and post-Musoma Resolutions (1974-1986) periods. Attention will be given to two questions, namely, how was manual work looked upon during these various periods of Tanzanian educational development, and what concrete steps were taken to inculcate in the young positive attitudes towards manual work. For the period 1967-1986 the study will focus on what has been happening in secondary education.

#### Education and Manual Work

Pre-colonial Tanzania. Pre-colonial Tanzania was populated by various clusters of tribes who lived as peasants, pastoralists or traders. These societies were broken up into small socio-politico-cultural units, known as villages. Village members were regulated by their mutual relationships as members of one community which needed everyone's cooperation in order to survive. One characteristic of these societies, was that wage-labor was unknown to them. Every able-bodied person worked hard

for the survival of the whole community, rather than for the generation of "surplus value."<sup>1</sup>

The economic life of precolonial societies was varied. There were peasants who were engaged in producing seasonal crops such as maize, sorghum and rice. This was a labor-intensive and shifting type of agriculture. A permanent crop, banana, was the backbone to the economy of the cooler and more fertile areas on the western shores of Lake Victoria and the northern area around Mount Kilimanjaro. The pastoralists, on the other hand, lived in drier areas. They were always on the move in search of water and good grass for their cattle. Other economic activities, included trading and artisanship. There was a thriving trade in grains, pots, livestock, fish, bark cloth, spear shafts, wood carvings and so on. The Yao and Nyamwezi were renown trading communities which played a significant role in the diffusion of new products, such as rice and maize in different parts of Tanzania.<sup>2</sup>

Indeed it would be a great mistake to think that, before the coming of Western education, these societies had no educational system whereby they could pass on to the younger generation the beliefs and values which gave them identity and existence.<sup>3</sup> The type of education which was prevalent in these precolonial

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<sup>1</sup> Justinian Rweyemamu, Underdevelopment and Industrialization in Tanzania (New York: Oxford University Press, 1972), p. 3-5.

<sup>2</sup>Ibid., p. 8.

<sup>3</sup>J. Cameron and W. A. Dodd, Society, Schools, and Progress in Tanzania (New York: Pergamon Press, 1970), p. 47.



societies is well described by Nyerere:

The fact that precolonial Africa [Tanzania] did not have "schools" -- except for short periods of initiation in some tribes -- did not mean that the children were not educated. They learned by living and doing. In the homes and on the farms they were taught the skills of the society, and the behavior expected of its members. They learned the kind of grasses which were suitable for which purposes, the work which had to be done on the crops, or the care which had to be given to animals, by joining with other tribes and with the spirits by listening to the stories of the elders. Through these means, and by the custom of sharing to which the young were taught to conform, the values of the society were transmitted. Education was thus "informal"; every adult was a teacher to a greater or lesser degree. But this lack of formality did not mean that there was no education, nor did it affect its importance to the society. Indeed, it may have made the education more directly relevant to the society in which the child was growing up.<sup>4</sup>

From the above, one may confidently infer that precolonial education was essentially functional, that is, with the sole purpose of the immediate induction of the young into society. As Fafunwa and Scanlon suggest, precolonial education emphasized social responsibility, job orientation, political participation and acquisition of spiritual and moral values.<sup>5</sup> It was a happy balance between general and vocational education well suited to meet the needs of the community. There was a positive attitude towards manual work and vocational education in general. Children learned by doing, as they were involved in practical farming,

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<sup>4</sup> Julius K. Nyerere, UJAMAA - Essays on Socialism (Oxford University Press, P.O. Box 5299, Dar es salaam, Tanzania, 1968), p. 45.

<sup>5</sup> A. B. Fafunwa, & J. U. Aisiku, eds., Education in Africa: A Comparative Study, (Boulder, Co. Westview, 1982), p. 9; and also D. Scanlon, Traditions of African Education (New York: Bureau of Publication, Columbia University Press, 1964), p. 3.

fishing, and pastoral activities.<sup>6</sup> They also learned some craftsmanship such as weaving, sculpting, drumming, smithing, carpentry, soap-making, pottery and dyeing. A few were inducted into practical professions in the community, such as, priesthood, medicine, hunting, military, chieftaincy and so on.<sup>7</sup>

All in all, the type of education described above allowed no room for pupils to be disinclined towards manual work. On the contrary, it was seen as the only way individuals and the community could survive in a subsistence economy. Manual labor, rather than being seen as marketable commodity, was regarded as necessary means of survival. The general ethic towards work was: work to live, rather than live to work. In this context, manual work was still being perceived in the light of its two humanistic values, namely, the humanization of nature, that is producing things useful to humankind, and the education of the persons involved in the process of working. What, then, is the explanation behind the disinclination toward and even the hatred of manual work currently observable among students in Africa and Tanzania in particular? This is the point of discussion in the following section of this chapter.

Colonial Period (1885-1961). The Tanzanian mainland was a German colony from 1885 to 1918, and later became a British

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<sup>6</sup> Marjorie Mbilinyi, "The Tanzania Experience: Education for Liberation and Development." In H. Hinzen & V. H. Hunsdorfer, eds., History of Formal Schooling in Tanzania (Paris, UNESCO: Institute of Education, 1979), pp. 6-87.

<sup>7</sup> Fafunwa, Education in Africa: A Comparative Study, p. 15.

trusteeship colony from 1918 to 1961.<sup>8</sup> During this period, a process took place whereby all aspects of development, including education, were distorted and subordinated to the wishes and desires of the colonial powers. A center-periphery relationship was established between Tanzania and its colonial masters. In relations of work and production, the metropole became the center of product disposal, source of managerial skills, decision-making, and final determination of the pattern of resource combinations which were to be adopted.<sup>9</sup> The colony, Tanzania, on the other hand, was reduced to a mere source of the factors of production, fulfilling the demands determined by the metropole. In this way, the colonial political economy became dependent and subservient to the metropolitan political economy.

The writer suggests that this fundamental change in the purpose of work and production is at the root of the development of negative attitudes towards work and manual work in particular, among people with a colonial historical background. People became alienated from their labor and had to produce not for the betterment of their societies but rather that of the metropole. Gradually, the colonized people internalized the attitude that manual work was only a means of getting integrated into the colonial cash economy. It was not part of their commitment to their societies. Moreover, the role of significant others, in

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<sup>8</sup> A. Mohiddin, African Socialism in Two Countries (London: Croom, Helm, 1981), p. 41.

<sup>9</sup> Rweyemamu, Industrialization in Tanzania, p. 13.

this case the colonial officers on the spot, brought home the message that high status in society was closely linked with liberation from manual work.

Since education was practically the only means available for social mobility in colonial times, the colonized people came to believe that the best education was the one making them like their masters, that is, having nothing to do with manual work. In this way seeds were sown for the favorable position, the elitist type of education enjoys even to this day and age in Africa and Tanzania in particular.<sup>10</sup> Although colonial governments tried to introduce vocational education, this move was resisted because the motives behind were thought to be wrong and because it was by now believed by colonized people that academic education was the best. A brief description of what happened both during the German and the British period follows.

The German Colonial Period. Education of this period corresponded to the needs of the colonial economy. The Germans had established plantations of cotton, sisal, coffee, and rubber. This was done by using force to alienate land from the African holder, whom they coerced directly or indirectly to supply labor to these plantations. The brutality of forced labor was one of the causes of the Maji Maji War of 1905-07 against the Germans. In 1897, a taxation ordinance was passed whereby each African had to pay a hut tax, which he could only afford either by selling

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<sup>10</sup>The elitist element in colonial education is discussed by Philip G. Altbach & Grail P. Kelly, Education and Colonialism (New York: Longmans Inc., 1978), pp. 30-31.

his proceeds or selling his labor in colonial plantations.<sup>11</sup> By 1912 the Germans had drawn maps of the country, built railways and roads, towns were laid out and minerals explored.<sup>12</sup> It was becoming increasingly obvious to the German colonial government that in order to maintain a stable colonial administration and infrastructure, it was necessary to increase the supply of manpower with some literacy and craftsmanship. Thus the colonial government embarked on establishing more educational institutions besides the existing mission and moslem schools, in order to meet the demands of the colonial political economy. Indeed, what Moumini remarked about colonial education in Africa applies in particular also to Tanzania.

The essential aim of [colonial] education was to supply the subordinate personnel necessary to the effective functioning of the colonial administration, such as clerks and interpreters, employees in commerce, nurses and veterinary assistants, elementary and secondary teachers, assistants to doctors and workers in various fields.<sup>13</sup>

By 1914, there were sixty primary schools and nine post-primary educational institutions.<sup>14</sup> These institutions responded to the demands of the colonial economy by concentrating on the teaching of the crafts such as carpentry, building, shoe-making, and so

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<sup>11</sup> Ibid., p. 21.

<sup>12</sup>A. Coulson, Tanzania: A Political Economy (Oxford: Clarendon Press, 1982), p. 40.

<sup>13</sup> Moumini Abdou, Education in Africa (New York: Frederick A. Praeger Publishers, 1968), p. 37.

<sup>14</sup> Cameron, p.56.

on.<sup>15</sup> All these skills were required to maintain the colonial infrastructure. By this time, Tanga school was the only officially recognized school which offered some literacy to a few Africans, who were being prepared for middle-level power positions. This school was the training center for Liwalis, Akidas, and Jumbes.<sup>16</sup>

In spite of the vocational orientation of almost all schools during the German colonial period, the results were against vocational education and manual work for three basic reasons. First, this type of vocational education was organized in the interest of the colonizers. The skills imparted were not corresponding to the economic life of the people. Students could perceive the obvious contradiction that this type of vocational education was designed to promote the economic aims of the colonial economy and only marginally benefit the masses of the people. Secondly, the experience of coerced manual labor and harsh working conditions on German plantations greatly contributed to a negative attitude towards manual work. Thirdly, the reward system in the colonial society favored academic rather than vocational education. The Liwalis, Akidas and Jumbes, who had access to a somewhat literary education, were socially and economically better off than those who had vocational education.

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<sup>15</sup> Coulson, p.41.

<sup>16</sup> The Liwalis, Akidas, and Jumbes were local elites who collaborated with the German colonial regime. They supervised their fellow Africans and played a middle-man's role between the German government and the African workers.

Thus it came to be believed by the colonized people that the type of education which could liberate them from forced manual labor, raise their social status and enable them to compete with their colonial masters was an academic-oriented education. In this context, vocational education was perceived as a colonial ploy to maximize the exploitation of the labor of the colonized and to perpetually subordinate them to their colonial masters who had a privileged access to general literary education.

Since the majority of schools during this period were mission schools, it is necessary, in order to complete the picture, to mention what was taking place in these schools. In all fairness one has to acknowledge that in mission schools the habit of honest and hard work was fostered by a religion-inspired work-ethic. This is a quality which is attributed to Mission-run schools and other institutions even up to the present time. Unfortunately, however, even in these schools, a general, society-oriented positive attitude towards manual work was not developed.

In the first place, missionary education was introduced as subservient to evangelical aims. Missionary schooling had two roles: first, it was the most effective means of achieving religious instruction and secondly, it was as an attraction and incentive for the Africans to allow their children to be subjected to missionary influence.<sup>17</sup> The curriculum in these

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<sup>17</sup> Stephen J. Ball, in "Imperialism, Social Control and the Colonial Curriculum in Africa," states that, "Throughout the nineteenth century (one may extend the period to the end of the

schools has been described as an "Evangelical curriculum."<sup>18</sup> Religion pervaded the whole curriculum with only peripheral efforts to impart basic skills in the three R's. What Leslie A. L. James remarks about missionary education in Central Africa by 1906, applies also to a great extent to the contemporary missionary education in Tanzania.

For one thing each mission had its own ideas of what to be taught. So did the rest of the European community. Admittedly, preference was for Bible readers and lay preachers in addition to skills needed for a growing [colonial] industry and expanding [colonial] agriculture. While the Africans were not expected to assume responsibilities connected with agriculture and industry, they were expected to be at least literate, and be capable of assisting their European masters.<sup>19</sup>

With due respect for the bona fide efforts of individual missionaries, it is clear from the above remarks that goals of the missionary pioneering work in education were confused, to say the least. Both academic and vocational education of this period were poor and indirectly geared to serving the colonial economy. Indeed, missionaries played a big part in the introduction of cash crops (e.g. coffee in the Kilimanjaro Region), new styles of architecture and cookery, but all these efforts served more the

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First World War) the bulk of the provision of Western schooling in colonial Africa was initiated by and remained in the hands of a wide variety of American and European missionary organizations which had entered Africa to proselytize the natives and envisioned themselves as bringing a higher view of life to benighted savages," Journal of Curriculum Studies 5 (July-September 1983): 238.

<sup>18</sup> Ibid.

<sup>19</sup> James A. L. Leslie, Racialism and Education: Aspects of Development in Former British Central Africa (Dayton Ohio: Brown and Kroeger, 1965), p.27.



missionaries, the colonial masters and the African elite minority rather than the masses. In the production of cash crops no effort was made to transfer western agricultural technology. For example, throughout the colonial period the hoe remained the chief tool of production providing the demand of raw materials by the metropole. Using primitive tools to produce for the demands of industrialized economies of the metropolises put such an extraordinary strain on the peasant and plantation manual laborers that the young grew up conditioned to see agriculture as unpleasant, arduous and to be avoided through the acquisition of an elitist education. Also, the skills in building, shoe making, cooking and so on, were mostly used to improve life conditions of missionaries at mission stations and of colonial masters in towns and administrative centers. While the quality of life of peasants remained unimproved, their labor was exploited to put up mansions in towns and mission stations, to construct urban and export oriented roads, and to prepare sumptuous meals for colonial masters at very minimal wages. The material contrast between the life styles of African workers and their colonial masters was an effective silent lesson to the young that the improvement of their lot did not lie in the exertion of manual work but rather in the acquisition of elitist education, which would open doors to modern life and liberate them from the poverty and misery of manual laborers.

In summary manual work and vocational education, during the German colonial period, were perceived by the colonized people as

irrelevant to the needs of their societies and in that context inadequate as a means to improve their lot, challenge the colonial system, and regain control over their lives and the destiny of their societies. It will be shown in the following section that the situation was no better during the British colonial period.

The British Colonial Period. Educational developments during the British colonial period may be grouped into those of the interwars and post World War II periods. Below is a brief sketch of how these developments affected African (Tanzanian) attitudes towards manual and vocational education in general.

The interwar period (1919-1939) was the time when the British took over control of the colony of Tanzania from the Germans. The change of masters did nothing to improve the lot of the colonized people. In fact, the conditions of the people became worse as the British cunningly applied their strategy of "imperialism on the cheap" (Indirect Rule) to entrench themselves in their new colony. As far as education was concerned four developments took place during this period.

The first development was the growth of direct government involvement in education. This was partly due to the awareness, especially after the experiences in India, that education was such a powerful tool of social control that it would be dangerous to leave it in the hands of missionaries. Moreover, direct intervention of colonial authorities in education was strongly recommended by the Phelps-Stokes Commission of 1922 which

observed that missionaries were no longer able to handle the whole situation. It is, however, interesting to contrast government intervention in Europe during the same period with that in Africa. Whereas in Europe public authority intervened in education in order to facilitate greater educational access and provision to meet individuals' and society's needs, in Africa (Tanzania), the intervention of colonial authorities served two types of social control on African societies. By limiting educational provision to mere rudiments, they were able to socialize the African into an obedient uncritical peasant or industrial worker. Similarly, by limiting educational access to a small minority of the population, they were able to maintain the cultural silence of the exploited peasantry. Such an approach encouraged an elitist mentality and a contempt of the peasant life among the extremely few Tanzanians who were privileged with this rare commodity of education. Thus, in spite of the rhetoric of the Phelps-Stokes Commission's recommendations, colonial government intervention in education did not mean a blessing for African societies, nor did it promote positive attitudes towards vocational education.<sup>20</sup>

The second development was the emergence of "Adapted Education for Africa," which was applied by the British in Tanzania. The Phelps-Stokes Commission, after surveying the educational conditions in Western, Equatorial and Southern Africa

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<sup>20</sup> W. F. Connel, History of Education in the Twentieth Century (New York: Teachers' College Press, Columbia University, 1980), p. 317.

(1922) and in Eastern Africa (1925), among other recommendations, suggested that efforts should be made to eliminate lack of "intelligent adaptation of school practices to the interests and experiences of the pupils and to the life and needs around them."<sup>21</sup> Two criticisms were raised against the then existing colonial curricula of education. It was observed that these curricula were too bookish and that attitudes of graduates coming from academic oriented schools were not good. Therefore, it was necessary to develop an "adapted curriculum," with a stress on technical, vocational and agricultural training rather than on the traditional subjects of the academic curricula.<sup>22</sup> The "Adapted Curriculum" had three themes: first, the development of a special education separate from that of whites and adapted specifically to the "needs" and "peculiarities" of blacks; secondly the unfolding of black education that would serve as an education for life; and thirdly the assumption that the dual school system of Southern United States of America was relevant

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<sup>21</sup> The Advisory Committee made a statement in the 1925 Memorandum that, "education should be adapted to the mentality, aptitudes, occupations and traditions of the various peoples, conserving as far as possible all sound healthy elements in the fabric of their social life, adapting them where necessary to changed circumstances and progressive ideas, as an agent of natural growth and evolution." In T. Resnick, ed., Tanzania: Revolution by Education (Arusha: Longmans of Tanzania, 1968), p. 17.

<sup>22</sup> Ball, "Imperialism, Social Control and Curriculum in Africa," p. 250.

to the needs of African states.<sup>23</sup>

The "Adapted Curriculum" was not healthy in its origins. Thomas Jesse Jones, who had a great impact on the Phelps-Stokes Commission, borrowed this type of curriculum orientation from the black educational institutions in the American south, namely, the Hampton and Tuskegee Institutes, and particularly the Penn School on St. Helen Island off the South Carolina coast. As King points out, education in those institutes was a "caste education, based on industrial education (i.e. manual training) designed to fit blacks into a subordinate position in white dominated society, where they would serve white needs but not challenge white control."<sup>24</sup> The Hampton Institute was designed to be a drilling ground for industrial workers and was not meant to produce scholars. It was also supposed to prepare leaders for "a stable, literate, and semi-skilled community that would remain in a state of permanent economic, political and social subordination to the dominant white sector of the [American] southern society."<sup>25</sup>

It is not surprising, from the above explanation, that the idea of the "adapted curriculum" was quite intriguing to the colonial governments which were interested in getting, through

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<sup>23</sup> Kenneth J. King, Pan Africanism and Education: A Study of Race Philanthropy and Education in the Southern States of America and East Africa (London: Oxford, Clarendon Press, 1971), pp. 252-59.

<sup>24</sup> Ibid., p. 21.

<sup>25</sup> Agrippah T. Mugomba & Mougo Nyagah, Independence without Freedom: The Political Economy of Colonial Education in Southern Africa (Santa Barbara, California: Clio Press, Ltd., 1980), p. 85.

education, the laboring masses of Africa to accept group confinement and routine chores required for the maintenance of capitalist production. As Foster points out, the general aim of such a curriculum was the development of "habits of steady industry leading to a settled and thriving peasantry."<sup>26</sup> The idea of "habits of steady industry" was borrowed from contemporary attitudes towards the education of the working classes in Europe; while the idea of "settled and thriving peasantry" indicated the desire of the metropolitan governments not to attract the African away from the land into the modern sector of the colonial economy which was based on cash crop production by peasants. In the practical application of the adapted curriculum, educational segregation resulted. Separate schools were set up for European, Asian and African children, with the allocation of resources and stress on academic subjects in the descending order. Tanzania was a good example of this tripartite system. In a descending order, European schools, which were oases of luxury with a literary curriculum, Asian schools, geared to train middle-men in business, commerce and industry, and at the bottom of the ladder, African schools with vocational orientation and very little access to the English language. In 1946, colonial government expenditure on education per student was an illustration of the contradiction in the system: 1.9 English Pounds per African child, 4.4 English Pounds per Asian child and 38.00 English

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<sup>26</sup>Philip. J. Foster, Education and Social Change in Ghana (London: Routledge, 1965), p. 8.

pounds per European child.<sup>27</sup> The unfairness of the "adapted curriculum" provoked resistance from Africans, and that is the third development in education of this period.

After military resistance to colonial rule had failed (Maji Maji war of 1905-07), Tanzanians by the 1920s adopted the strategy of self-improvement with the ultimate aim of being able to regain their independence by confronting the colonial masters on equal ground with the same modern skills. Their hope of doing this lay in the acquisition of Western education. Thus a characteristic of this period was that Africans yearned for western education. By looking at the examples of colonial schools for European children and by carefully weighing the chances for social mobility, Africans longed for academic-oriented education. On the other hand, the colonialists considered the African demands for academic-oriented education as a threat to the system. Lord Lugard, author of "Dual Mandate" and an ardent advocate of the "adapted curriculum," had strong words to say against the growing African demands of education of the same quality as that given to European children.

Education has brought to such men only discontent, suspicion of others and bitterness which masquerades as racial patriot-- As citizens, they are unfitted to hold posts of trust and responsibility where integrity and loyalty are essential.<sup>28</sup>

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<sup>27</sup> P. Msekwa & T. L. Maliyamkono, The Experiments: Education Policy in Tanzania (Dar es salaam: Black Star Agencies, 1979), p.8. Quoted from Tanganyika Education Report, Annual Report 1946.

<sup>28</sup> Ball, "Imperialism, Social Control and Curriculum in Africa," p. 244.

Thus during this period tension was heightened between the colonial masters and the colonized people as to what was the best type of education for Africans. While the colonial government pushed for the "adapted curriculum" with its vocational orientation, the Africans resisted it because it was oppressive and discriminatory. This atmosphere did not favor the growth of a positive attitude towards vocational education and manual work among students.

The fourth development, which negatively affected Africans' attitude towards manual work, was the ideology of "racism" which permeated colonial education. The colonial authorities used racist assumptions to legitimize the "adapted curriculum" and this provoked resentment and opposition on the part of the Africans. It was assumed, for example, that Africans were innately less intelligent than Europeans and, therefore, needed a long period of practical education before any further development in literary education could be considered.<sup>29</sup> This assumption is even found in the literature of some missionary educators. It was assumed that a minimal ability to read the scriptures was the most that could be expected in the way of intellectual achievement from the majority of the mission pupils. The achievement of successful African pupils in academic education was either dismissed or belittled. Dougall's comment exemplifies such an attitude:

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<sup>29</sup>J. Anderson, The Struggle for the School (Nairobi: Longmans, 1970), p. 61.



It is noteworthy that effort of pupils is given to the feat of memorization and those who know the African will agree in expressing astonishment at his remarkable power of verbal memory as against his power of understanding meaning.<sup>30</sup>

similar statements were made by colonial officers in Tanzania during this period. In 1925 the Director of Agriculture in Tanganyika stated that, "only five percent of all African students had sufficient intelligence to profit from academic instruction". In 1931 the Director of Agriculture reiterated that "the African is a peasant farmer at heart and should be trained rather than educated." Also, the Superintendent of Education for Bukoba District supported the same view in his 1931-32 Annual Report by saying that, "no native I have met can teach English or Geography. The limits of their mental experiences prohibit them."<sup>31</sup>

The above racist innuendos characterized the colonial educational drive during this period in which the Africans as a group were thought of as "sufficiently different from the Europeans to merit the same access to knowledge".<sup>32</sup> This

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<sup>30</sup>J. W. C. Dougall, "Religious Education," The International Review of Missions 15 (July 1926): 497; also in similar quotes of W. H. Maclean, in M. Omolewa, "The Adaptation Question in Nigeria Education 1916-1936," Journal of the Historical Society of Nigeria 8 (December 1976): 122.

<sup>31</sup>Marjorie Mbilinyi, "African Education during the British Colonial Period 1919-1961." In Martin Y. Kaniki, ed., Tanzania Under Colonial Rule (Longman 1980), p. 262.

<sup>32</sup> King, Pan-Africanism and Education, p.15; also, Ball makes a relevant in "Imperialism and Curriculum in Africa," p. 254, ". . . to the arguments stressing the political and social undesirability of African access to European Education, and those which emphasized the need to adapt the education being offered to the 'needs' and 'conditions' of the African, can be

debilitating racial bias permeated the educational psychology, sociology and pedagogy of this period, and in turn, vitiated the colonial approach to manual and vocational education for Africans. This indirectly reinforced negative attitude towards manual work in education among African students and biased them in favor of the academic curriculum. Mukyanuzi in support of this argument remarks that, "the Africans had a legitimately strong case in rejecting the vocational curriculum, because it was based on ridiculing assumptions of their intellect."<sup>33</sup>

What, then, did take place during the Post-World War II period? Three developments deserve mention, namely, a change of attitude towards the educability of the African child, a crash program of educational expansion and a triumph of the academic curriculum over the vocational and manual work-oriented curriculum. A brief comment will be made on each of these developments.

First, the myth about the innate inferiority of the African mind was gradually refuted. Social and anthropological researchers of this period began to challenge the racist theories of the first half of the century which painted the African child as "unstable, impulsive in the face of new experiences, lacking in power of attention and demanding tasks, intellectually conformist, without personal uniqueness, and as

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added the case of the African's intellectual inability to benefit in any real way from European subject-matter."

<sup>33</sup> Mukyanuzi, "The Political Economy of Educational Reforms in Tanzania," p. 21.

having a rote rather than a rational approach to learning."<sup>34</sup> By the 1950s, a new picture of the African child was beginning to emerge, with greater appreciation of the extent of individual differences between African children and a greater respect for their personality characteristics and their intellectual adaptability. With a greater appreciation of the "educability" of the African child, more attention was now being paid to the improvement of the environmental conditions hitherto inhibiting the educational blooming of the African child.

The second development of this period was the sudden shift of colonial educational policy from a gradualist to a crash-program approach. Four factors precipitated this change. First, there was a growing international concern for educational development in the underdeveloped countries. The United Nations Educational, Scientific and Cultural Organization (UNESCO), established in 1946, had as one of its aims the experimenting with various ways of assisting colonial education in underdeveloped countries. The second factor was the African demand for education, which escalated during this period due to the rise of nationalism and the war experience.<sup>35</sup> Another factor was the rise of the Human Capital Theory of Education in the

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<sup>34</sup> Connel, History of Education in the Twentieth Century, p. 406.

<sup>35</sup> See Mugomba & Mougo, Colonial Education in Southern Africa, p. 233: "Ultimately the forceful wind of change caused by Post World War II nationalism and demands for decolonization scared the settlers (colonial authorities) and forced them to revise their educational policies."

1950s whereby education was seen as the major means of raising production in the colonies.<sup>36</sup> Lastly, it became clear during this period that colonial rule was inevitably coming to an end and very soon. Therefore, the colonial masters were concerned about the preparation of a metropolitan-oriented elite that would assume power at independence without jeopardizing the economic interests of the European countries. Cumulatively the above factors launched the colonies in an educational stampede which is exemplified by what happened in Tanzania as given in Table 1. The contrast between educational expansion in the pre and post World War II is quite obvious. One should, however, exercise caution in evaluating this educational expansion of the 1950s. It was estimated that by 1960, only fifteen percent of six to fourteen year olds were in primary school in the French colonies and thirty percent in the British colonies.<sup>37</sup>

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<sup>36</sup> Human Capital Theory postulates that the most efficient path to national development in any society lies in the improvement of its population, that is, human capital, through education. See Q. V. Ingemar Fagerlind and Lawrence J. Saha, Education and National Development: A Comparative Perspective (New York: Pergamon Press, 1983), pp. 17-18.

<sup>37</sup>Connell, History of Education in the Twentieth Century, pp. 409-10.

TABLE 1

## ENROLMENT IN AFRICAN SCHOOLS BY LEVEL AT FIVE YEAR INTERVALS

1926 to 1956

	YRS 1-6a (assisted)	YRS 7-12a (assisted)	TOTALa (assisted)	YRS 1-4b (Unassisted)
1926	5,843	---	5,843	162,806
1931	22,693	---	22,693	144,917
1936	30,570	26	30,596	191,061
1941	C	C	39,869	C
1946	115,516	1,446	116,962	C
1951	194,251	4,869	199,120	C
1956	345,014	13,857	358,871	84,300

a. Totals are for schools assisted by the colonial governments. The figures for 1926-36 include pupils enrolled in teacher training and vocational courses. By 1951, the seventh and eighth years had been transferred from the secondary to the primary program.

b. Statistics for unassisted schools are given in precise figures in early Annual Reports, but their reliability is highly suspect.

c. Not available.

Source: David R. Morrison, Education and Politics in Africa: The Tanzanian Case (Nairobi: Heinman Educational Books, 1976), p. 44. Original Source: D.E., Annual Reports.

By 1956, another report was given which showed how limited were the results of the educational enterprise in Tanzania (see Table 2).

TABLE 2

## ENROLMENT OF TANGANYIKAN AFRICANS BY EDUCATIONAL LEVEL, 1956

Level	Institutions	Enrolment
Primary (I-IV)	2,589	336,079
Middle (V-VIII)	357a	32,845
Secondary (IX-X)	24	2,119
(XI-XII)	4	290
Higher	1b	
Advanced Secondary		80
Non-Degree professional courses		59
Degree courses		20
Others	c	8
Teachers Training Courses		
Post Std.VII	26	2,072
Post Std.X & XII	4	182
Vocational Courses	2d	832

- a. Includes 90 district schools giving only standards V and VI and 10 secondary schools giving standards VII and VIII.
- b. The Royal Technical College did not open until 1957. Statistics for students studying at higher level outside East Africa were not published.
- c. Includes students doing post-graduate diploma, school of Art, and special entry general courses.
- d. Ifunda Trade School and Tengeru Natural Resources School. Private Agencies and some government departments ran other institutions.

Source: Ibid. p. 52. Primary Source: D. E. Annual Report 1956.

The third educational development of the period, most relevant to the theme of this chapter, was the escalation of African resistance to the "adapted curriculum" and the subsequent triumph of the "academic curriculum." The resistance to the adapted curriculum, which began in the inter-war period, came to a climax in the post-World War II period. African leaders were more and more convinced that all attempts to implement the "adapted curriculum" were subtle maneuvers to retain the Africans in a subordinate position in the capitalist system. Therefore, they pushed for an academic-literary curriculum. This was chiefly due to a perceived apparent relationship between literary education and European domination of Africa, between academic education and chances for social mobility in the colonial political economy. Academic education was then believed to be the best education capable of leading to the liberation and modernization of Africa. After all, almost all the leaders of the nationalist movements were themselves products of the elitist system of education.

Therefore, since the colonial authorities stood to gain from such a curriculum, they gave in to the African demands for an elitist academic curriculum. By 1960, the academic curriculum had become the most popular in most African countries.<sup>38</sup> As remarked

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<sup>38</sup> See Ball, Imperialism and Curriculum in Africa, p. 260. "The efforts of the African push for access to a Western literary-academic education are plainly marked in the current provision of education in most ex-colonial societies, not least because the majority of education officials and teachers had acquired their own education through the academic system."

by Willis the triumph of "academic curriculum" over all forms of "adapted curriculum" was a pyrrhic victory for Africans.<sup>39</sup> This victory legitimized the academic curriculum with its underlying divisive dichotomies which militate against integrated national development. Such divisions include the divisions between mental and manual labor, modern and tribal African, English (or French) and vernacular speech, Western and traditional culture, literate and illiterate, schooled and unschooled.

The fascination in and adoption of the academic curriculum was a sad conclusion to the African struggle to find an educational curriculum that would best promote a genuine development of African societies. The rejection of the "adapted curriculum" was like throwing away the baby with bath-water. Though it originated from wrong assumptions and objectives, the element of making education practical and relevant was a crucial one for development. Craving for elitist academic education is chiefly responsible for the prevalent negative attitudes towards manual work and vocational education. This is worsened by the presence of a "diploma cult" which has done so much harm to development in African countries. Moumini makes this point well.

One of the consequences of post-war education has been the appearance and spread of a "diploma cult." At the root of this phenomenon was the strong desire of young Africans to "conquer" the diplomas until recently reputed "inaccessible" to Negroes [sic], and the satisfaction attendant upon success, and the legitimate respect and pride with which Africans surrounded the students and the hopes they invested in them. The process evolved rapidly when the first university graduates returned home, and engendered among a

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<sup>39</sup> Ibid.



number of African intellectuals a real cult of the diploma. Everything that was a manifestation of the esteem and a real respect which can be observed in Black Africa for learning was demanded by some Africans as a right due to them as a matter of course, and they sought it aggressively by amassing an impressive array of titles and real or fake diplomas. The situation degenerated until diplomas were exploited as capital that could be turned to profit. From this sprung political opportunism, careerism and, most important of all, a large part of intelligentsia in Black Africa became unproductive: engineers entrench themselves safely in offices, content to be directors or heads of bureaux, but occupied only with paperwork; professors are promoted to administrative jobs or sell their talents to a country without worrying much about principles; magistrates "hand out" justice according to the civil "code" or the "customary laws" codified by the colonial administration, and so on ad nauseam. This flight of a part of the African intelligentsia is one of the most important roadblocks to rapid progress in all areas of culture and education.<sup>40</sup>

One could recapitulate what has been said about colonial education and African attitudes towards manual work as follows. The colonial political economy with its coercive exploitation of the manual labor of colonized peoples, the role of significant others in the colonial economy, i.e., colonial officers and Asian middle-men, the cunning attempt to impose the "adapted curriculum" on Africans, and the reward system of education in the colonial society -- all conspired to build negative attitudes towards manual work in African societies and hence in the African school communities. The dominance of the elitist model of education and the craving for "white collar" jobs and lack of appreciation of manual work still prevalent in African societies

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<sup>40</sup> Abdou Moumini, Education in Africa (New York: Frederick A. Praeger Publishers, 1968), pp. 93-94.

The prevalence of elitism in neo-colonial education systems is also discussed by Altbach and Kelly, Education and Colonialism, pp.40-44.

are results of educational conditioning of the colonial period. Mukyanuzi makes a similar point:

And where attempts were made to provide vocational education, such efforts were bound to end up in fiasco, for the overall material conditions associated with the academic curriculum were too attractive to sufficiently motivate students and sustain their interests against any alternative like the vocational one. Indeed the colonial system did very little to inculcate into the pupils the strong desire to return to the rural areas as enlightened farmers and tradesmen to put their education in the service of the community in general.<sup>41</sup>

The following section of this chapter, gives a brief survey of the efforts that have been made since Tanzanian independence to reverse this tide of faulty educational development, as far as appreciation of manual work and its role in education are concerned.

#### Educational Development (1961-1967)

The two major educational reforms which took place during this period were the elimination of the tripartite school system and the expansion of post-primary education. This was done in order to meet manpower needs of the newly independent country. It is important to note that the neo-colonial framework of these reforms, the educational background of the planners and the wrong consciousness among the masses concerning the role of education, all combined to prevail against the appreciation of manual work in the educational process. Here is a brief description of the above mentioned reforms.

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<sup>41</sup> Mukyanuzi, The Political Economy of Educational Reforms in Tanzania, p. 21.

In 1961 legislation on racial integration of schools was discussed and a law was enacted. This act was aimed at changing the educational system from a loose, racially-based system to a unified national system, suited to the principles, requirements and aspirations of the new nation. It was explicitly pointed out that henceforth, the growth of formal education in Tanzania was to take place within the framework of a single system for pupils of all races and religious denominations. This law was enforced by the Education Ordinance of 1962, which stipulated that no child would be deprived of entry to any school, regardless of its historical establishment, on the basis of race and religion. This legal action, for the integration of schools, was followed by a series of educational policies aimed at removing barriers in the way of equal opportunity to schooling. In 1964 three steps were taken. First, school fees were abolished in secondary schools, thus opening up opportunities for children from poor homes. Secondly, Standard IV Examination was abolished, thus allowing all children to attend Primary I through Primary VII. Thirdly, the UTS (United Teachers Services) was formed in order to remove differences in terms of service between teachers in government schools and those in mission schools. These efforts toward integrating the schools system culminated in the Education Act of 1969, whereby all religious-based schools were nationalized so that all schools in Tanzania became public, except for a very few which remained private for various administrative purposes.

The other major educational reform of the period was the

expansion of the education system, especially post-primary education. This reform was precipitated by the political pressure for "Africanization" and the poor record of highly trained African manpower at the time of independence. Immediately after independence 'Africanization' became a major political question.<sup>42</sup> African Tanzanians were not satisfied with the fact that, in a country where they formed the majority, they should be so poorly represented as far as jobs were concerned. As Maliyamkono comments, a 1962 manpower survey in Tanzania revealed that over 85 percent of the Category A jobs (i.e. which required a University training or degree) were in the hands of non-Tanzanians.<sup>43</sup> As a reaction to this situation, in 1962, TANU, the ruling party, formulated and passed a policy of Africanization based on three main principles: first, that every vacancy should if possible be filled by a local appointee and resort should only be made to recruitment outside East Africa if no suitable candidate of any race could be found locally; secondly, the case of new appointments to the service, African candidates from Tanganyika should have priority claim to consideration; and thirdly, that only if no suitable qualified Tanganyikan African candidates were available should other

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<sup>42</sup> The term "Africanization" was later criticized and changed to "Tanzanianization" in order to avoid racial discriminatory implications.

<sup>43</sup> Ted. L. Maliyamkono, Abel. G. Ishumi & S. J. Wells, Higher Education and Development in Eastern Africa (Nairobi: Heinman Educational Books Ltd., 1982), p.18.

candidates be considered.<sup>44</sup>

This policy was vigorously executed during the period 1962-63 by Prime Minister Rashid Kawawa. However, it was soon realized that if such a policy (that is africanizing for its own sake) was not going to undermine efficiency, it was imperative to relate it to trained manpower situation. Unfortunately, however, at independence Tanzania was very poorly equipped as far as highly educated manpower was concerned. This fact is noted in Table 3 which shows the trained high-level manpower in selected professions in 1962.

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TABLE 3

EMPLOYMENT IN SELECTED PROFESSIONS BY RACE - 1962

Professions	African	Asian	European	Total
Architects	00	02	09	11
Civ.Eng'neers	01	22	61	84
Mech.Eng'neers	00	06	46	52
Surveyors	01	01	92	94
Physicians	16	11	108	184
Lawyers	02	11	44	57
Geologists	00	00	41	41
Zoologists	01	00	11	12

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Source: Pratt, The Critical Phase in Tanzania p. 93.

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<sup>44</sup> C. Pratt, The Critical Phase in Tanzania (1945-1968) (London: Cambridge University Press, 1976), p. 106.

It was moreover realized that this situation was not likely to change unless drastic steps were taken to expand post-primary education. Pratt describes vividly the basis of such pessimism.

There was still only a small number of Tanganyikans graduating each year from the two Universities in East Africa, Makerere University College (Uganda) and the Royal College (Kenya). In 1958, there were only 216 Tanganyikans at Makerere College and only 26 at the Royal College Nairobi. Many of those enrolled were doing diploma rather than degree courses. In 1959, the total output of Tanganyikan graduates from both institutions were 12. Even by 1962, the number of Tanganyikans graduating from these two University Colleges had only increased to 17. In 1959, it was estimated that 860 Tanganyikans were following courses overseas, a great many in preparatory or in technical courses rather than regular degree programmes. There was therefore no large body of Tanganyikans who were completing their university training and who would be returning to Tanganyika within the first several years of independence. Neither was there a substantial body of secondary school graduates available to begin professional or technical training. The secondary schools were crucial bottle-necks.<sup>45</sup>

This situation prompted the government in the Three Year Development Plan (1961-64) to place top priority on the expansion of secondary and higher education.

Implicit in the above decision was the influence of the "Human Capital Theory," which is based on the presumed high economic returns as a result of investment in higher education. The option of expanding secondary rather than primary education came from the assumption by then that the latter was less productive in national development. It was clearly stated in the Three Years Development Plan that expansion of secondary education was being chosen for "obvious economic benefits"

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<sup>45</sup> Ibid., p. 121.

expected, and that since no direct economic benefits flowed from primary school development, "there would be no increase in numbers of places available for entering Standard I."<sup>46</sup> The thrust for secondary education expansion was also reinforced by the Tobias Report of 1962.<sup>47</sup> This report suggested that since primary education is unproductive, except as a base for the recruitment of students to higher level institutions, it should be held back for a while in order to develop secondary education.<sup>48</sup> Similarly the UNESCO mission of 1963, endorsed that in Tanzania, "secondary education should continue to have first

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<sup>46</sup> See Development Committee of the Council of Ministers, "Three Year Development Plan for Education," mimeo, 1960.

<sup>47</sup> Tobias Report: At the request of the Tanzanian Cabinet, Mr. George Tobias was sponsored by the Ford Foundation to conduct a study of the country's middle and high level manpower requirements and to suggest ways of meeting them. See also, Tanganyika Government Paper No.2 of 1963, High Level Manpower Requirements and Resources in Tanganyika 1962-67, prepared by George Tobias (Dar es salaam: GP., 1963), pp. 4-5; also George Skorov, Integration of Educational and Economic Planning in Tanzania (Paris: UNESCO, 1966), p. 56-8.

<sup>48</sup> The manpower bias in early educational planning in Tanzania is well illustrated by this statement:

"Tanganyika cannot adhere to many attractive but abstract education goals which have been set by many international bodies. . . . If the line can be held on primary expansion. . . . it will be a major achievement. Any substantial educational resources which primary take beyond minimal levels will mean the diversion of resources vital to secondary, technical and higher education and as a consequence a reduction in the essential skill development on which the nation's economic development depends."

See, Ministry of Development Planning, "Development of Planning related to the Needs of Children in Tanganyika," mimeo, no date (probably, 1964), pp. 6 and 9. See also Skorov, Integration, pp. 43-5.

call on all resources."<sup>49</sup> Both, the Tobias and UNESCO reports had largely influenced the expansion of secondary education which was the educational priority for the Five Year Development Plan for 1964-1969. As a result, secondary school enrollment increased from 11,832 students in 1961 to 27,622 in 1966.<sup>50</sup>

A characteristic of the secondary education expansion, as described above, was a bias against vocational education, which was a colonial-nationalist carry-over. As earlier alluded to, the efforts of the colonial government to advance a curriculum somewhat adapted to rural life, was opposed and defeated by the nationalists. The nationalists, playing on the attitudes of the masses, who had been conditioned to believe that education was a means of escaping from rural life and its drudgeries, after the elections of 1958, attacked agricultural education programs in primary schools, based especially on their poor implementation. Solomon Eliufoo, who became Minister of Education after Independence, voiced the argument that Africans had been always suspicious of the policy from the outset because it was "something devised for Africans only, and . . . suspicion has continued because of poor results." Another speaker in the Legislative Council argued that preparation for life in the community was properly the function of the villages, and not of

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<sup>49</sup> UNESCO, "Report of the UNESCO Educational Planning Mission for Tanganyika," (Paris: Limited Mimeo Edition, 1963), pp. 9, 19, 22 & 39.

<sup>50</sup> Ministry of National Education (Tanzania), Report of Commission on National Education (Dar es salaam: 1982), Vol. II p. 9.



the school. Also a prominent European educator in Tanzania condemned "the fruitless idea of trying to make the agricultural revolution needed in Tanganyika through school boys [sic] in our middle schools instead of through adults."<sup>51</sup> Due to such debates, the emphasis on agriculture and vocational activities in schools were dropped for the adoption of a more strict academic curriculum. Little gardening and farm-work remained here and there in schools but merely as extra-curricular activity.

The same bias affected secondary education. Whereas at independence there were three institutions for technical education, namely, Dar es salaam Technical Institute, Moshi and Ifunda, by 1965, only the Technical Institute of Dar es salaam remained. The other two schools had dropped the practical curriculum in order to concentrate on academic subjects. This step was taken at the recommendation of the Tobias Report which stated that the skills imparted in these schools were irrelevant for modern needs.<sup>52</sup> This perspective of belittling manual work in formal education was also reflected in the statement of the Manpower Planning Unit which emphasized that "the prime responsibility of training skilled manual workers is that of

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<sup>51</sup> David Morrison, Education and Politics in Africa: The Tanzanian Case (Nairobi: Heinman Educational Books, 1976), p. 85-86. Quoted from Legislative Council Debates, 1958-59, Vol. IV, pp. 75, 85, & 89. The last two speakers were John Keto and Barbro Johannson.

<sup>52</sup> G. Tobias, High Level Manpower, pp. 10-12.

industry and not that of the educational system."<sup>53</sup>

In summary, the reforms of the early period of independence, including the expansion of secondary education, did not favor the appreciation of manual work in education. The pyramid type of education, with only a very small portion of the population having access to secondary education, misled the masses, students and even teachers to believe that the "cream" selected for secondary education was to be groomed only for white collar jobs as future administrators, managers, engineers, teachers and so on. There was no need to waste the precious time of such a special group in manual work activities. The modernization of the newly independent nation needed young men and women well prepared in "high status knowledge" which would enable them to understand and follow exactly in the footsteps of the developed countries.<sup>54</sup> The following section of this chapter will show how and why this approach in education was radically changed.

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<sup>53</sup> Quoted by A. R. Thompson, Education and Development in Africa p. 126. From Manpower Requirements, 1964-65 to 1968-69, p. 15.

<sup>54</sup> The phrase "high status knowledge" is understood as academic knowledge, a commodity which is marketed in schools and sets the elite apart from the rest of the masses. Apple defines it as "knowledge that is considered of exceptional import, is connected to the structure of corporate economies, and is related to and in fact seems to entail the non-possession of by others." See, Michael W. Apple, Ideology and Curriculum (Boston: Routledge & Kegan Paul, 1979), pp. 35-40.

### Educational Development (1967-1974)

The years 1967-1974 was a period of enlightenment as far as the importance of manual work in education is concerned. The policy of Education for Self-reliance reversed the received educational philosophy from academic to practical emphasis. The ESR made it crystal clear that manual work henceforth was to be part and parcel of formal education in Tanzania. Four goals were suggested in this document for the inclusion of manual work in the school curriculum.

The first goal was politico-ideological. As resolved in the Arusha Declaration, an Ujamaa Society was to be built, where all able-bodied people should work, and the school was to be an important place where the Ujamaa work-ethic had to be inculcated into the lives of the young people.<sup>55</sup> Implicitly, also, this policy was meant to legitimize mass oriented politics. It was stated in the ESR document that the break with the hitherto educational tradition was "a recognition that we in Tanzania have to work our way out of poverty and that we are all members of one society, depending on each other."<sup>56</sup>

The second goal was economic. Nyerere criticized the then existing educational system in these words.

Our young and poor nation is taking out of productive work some of the healthiest and strongest young men and women. Not only do they fail to contribute to that increase in output which is so urgent for our nation, they themselves consume the output of the older and often weaker people.

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<sup>55</sup> Nyerere, Ujamaa (Essays on Socialism), p. 15.

<sup>56</sup> Nyerere, Education for Self-Reliance, p. 18.

There are almost 25,000 students in secondary schools now, they do not learn as they work [sic], they simply learn. What is more they take it for granted that it should be so.<sup>57</sup>

In order to correct this mistake, the introduction of manual work activities was recommended for schools at all levels. The secondary schools and other forms of higher education were referred to more specifically in that they had to be organized in such a way that they could contribute to their own upkeep. Schools had to become integrated socio-economic educational communities.<sup>58</sup>

Another goal of productive labor in schools was socio-cultural. It was hoped that emphasis on manual work would help to integrate schools and the surrounding communities. Students would learn to appreciate the value of manual work and learn to respect the contribution of peasants and workers to their education. In productive projects, they would have the opportunity to exchange expertise with the villagers and appreciate the undocumented knowledge and skills treasured by the peasants. Within the school community, the involvement of teachers, students and administrators in the production process would facilitate the acquisition of the skills of collective planning, working and living together. Ultimately this would lead to the elimination of the elitist attitudes and the building of an Ujamaa society, based on the respect and contribution of every

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<sup>57</sup> Ibid., p. 13.

<sup>58</sup> Ibid., p. 17.

member of society.

Last, but not least, the inclusion of manual work in the school curriculum was intended for a practical-academic goal. The document emphasized that introducing productive labor in schools was not meant to make pupils mere tools of production using traditional methods, but that education should inspire and permeate all these activities. Productive labor had to facilitate the interaction between theory and practice, which are two essential moments of the learning act. By constantly making an effort to try out in production theories and principles learnt in the classroom, students would both validate their knowledge and become better producers in the process. In respect to this important aspect of manual activities the document (ESR) had this to say:

Neither does this concept of schools contributing to their own upkeep simply mean using our children as laborers who follow traditional methods. On the contrary, on a school farm pupils can learn by doing. The important place of the hoe and of other simple tools can be demonstrated; the advantages of improved seeds, of simple ox-ploughs and of proper methods of animal husbandry can become obvious; and the pupils can learn by practice how to use these things to the best advantage. The farm work and products should be integrated into the school life; thus the properties of fertilizers can be explained in the science classes, and their use and limitations experienced by the pupils as they see them in use.<sup>59</sup>

With the above clarification of the goals of manual activities in schools, what follows is a brief history of the practical implementation of the policy integrating manual work in the Tanzanian secondary school curriculum.

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<sup>59</sup> Ibid., p. 18.

The implementation of the reforms suggested by ESR was launched with the Conference on Education (10-14 April 1967) at the University College, Dar es salaam. The Conference was attended by all Regional Education Officers, all heads of Public Secondary Schools, Principals of Teachers' Colleges, Ministry of Education officials and Education Secretaries from various agencies. The Conference discussed ways and means of implementing ESR. Specifically, regarding the inclusion of manual labor in secondary schools, the Conference endorsed the idea that secondary education ought not to be solely a preparation to University but rather ought to prepare students for life and service in the community. Thus in order to "further the spirit of self-reliance, to inculcate respect for manual work, and promote physical fitness," the following practical projects were suggested for secondary schools. School farms were the first on the list. Activities on the school farm could include poultry, dairying, fruit and vegetable gardening, growing of cereals and fish ponds, bee-keeping, nurseries of crops and ornamental trees and shrubs. It was also suggested that different handicrafts could be introduced in schools. Some possibilities to be explored included: book-binding, pottery, basket-making, weaving, shoe-making, woodwork, brick-laying, wood-carving, fishnet-making, boat-building, and making or improving on simple farm implements. It was noted that such activities, besides their economic and educational value, could enhance the aesthetic values among students. Salt-making was suggested for schools along the coast

or in places where salt is found in its natural state such as in singida and Uvinza. It was hoped that learning the traditional processes of extracting and purifying salt from sea water and salt-lakes by evaporation would be of scientific value to students. It was also strongly recommended that students ought to play a greater role in the maintenance of buildings and grounds of their schools. They could be responsible for activities such as grass-cutting, sweeping dormitories and classrooms and washing eating utensils. Lastly, the conference suggested the starting of cooperative shops in schools. Pupils and teachers could buy shares and the profits realized could be for the benefit of the whole school. This move, it was hoped, would provide excellent opportunities for students to learn cooperative business practices and deal with the physical hustle involved in the transportation, storage and disposal of shop items especially the bulky ones such as sugar, salt and so on.

In all these activities, the conference emphasized the involvement of all members of the schools community, that is, teachers and students. On the school farm, for example, teachers were not simply to supervise but had to share in the doing of the work together with students. The role of teachers and the importance of involving students in decision making, at all stages in these projects, were clearly spelled out by the Conference.

It is only by their [teachers'] good example and interest in these activities that pupils will learn the respect for labor and the spirit of cooperative effort. And in order to make pupils fully involved in these activities they must be

given every opportunity in decision making in the planning and implementation of the projects.

In the light of the proposed projects, a suggestion was made that not less than eight hours per week should be devoted to farm activities and other forms of manual work, provided the time allocated by the Ministry of Education for academic work was maintained.<sup>60</sup>

Refreshed and armed with the above ideas, the principals of secondary schools proceeded, with much enthusiasm, to implement the policy of integrating productive work in education. A panoramic view of what took place between April and December 1967 is provided in a composite report of "self-reliance activities" in secondary schools issued by the Ministry of Education on 31 December 1967. To give the reader some idea of what took place, a brief description of various projects in various schools and regions will be selectively provided below.

Bwiru Girls' Secondary School (Mwanza Region) had a school farm and poultry unit. On the school farm were planted vegetables, including cabbages, tomatoes, egg plants, onions and spinach. For the period of June-December 1967, the school farm produced yields amounting to TS (Tanzanian Shillings) 2,700.00 (equivalent to \$344 by then). Poultry raising was also started there with the help of agricultural experts from Uluguru Agriculture School. At Rosary Girls' Secondary School (Mwanza Region) a ten-acre school farm, an orchard with six hundred fruit

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<sup>60</sup> Ministry of Education (Tanzania), Conference on Education for Self-Reliance (May 1967), pp. 8-10.



trees and a poultry project with fifty white leghorns were started. Unfortunately, it was reported that no records of proceeds from the projects were kept. Chopra (Mwanza Co-educational) had among other projects, sewing for girls, a school canteen, fishing, a vegetable garden and a poultry unit. In the fishing project, the school worked with the Fishermen Association of Mwanza. The poultry unit at Tabora Boys' Secondary School (Tabora Region) was an interesting case. The unit started with 42 one-day old New Hampshire Red chicks. Boys built the poultry house, made water troughs, food trays and so on. Chicken feed was made locally using a combination of Kigoma Dagaa (a kind of very small fish), maize, rice and beans. It was indeed an interesting and educative experience for students to handle those delicate chicks and help them survive. At St. Mary's Tabora Secondary School, students dug a school dam for irrigation. With the help of a bull-dozer rented from a local farmer, they were able to make a dam full of two million gallons of water. Fifty fish were planted in the dam. At Kazima Co-educational Secondary School (Tabora Region) students started a "Local Crafts Project" making brooms, sandals, baskets and the like.

At Livingstone Secondary School (Kigoma Region) a fishing project was started with the cooperation of the Fisheries Department. Twice a week a group of twenty to twenty-five boys with a teacher went out fishing in a boat on Lake Tanganyika and usually brought a catch of not less than 150 pounds of fish, which was used for feeding the school as an alternative to beef.

songea Secondary School (Ruvuma Region) reported students' contribution in maintaining school grounds. Students were maintaining the school's sports grounds, sweeping their dormitories and dining hall. It was estimated that the school was able to save the equivalent of the labor of: two men in the kitchen, six men in the school garden and four men in the maintenance of school grounds. This was roughly equivalent to TS (Tanzanian Shillings) 17,280 per year -- a very small fraction of the cost of running the school, nevertheless a good beginning. Kingosera Secondary School reported a "building project" which would provide to the school, a hall, a carpentry shop, a Geography room and a storeroom. Grewal Secondary School (now Bukoba- - Kagera Region) reported on the school's effort to help the community around. The school had helped in rescue work when the government hospital building was damaged by the hurricane. Boys cut the logs and branches that fell on the buildings. Also on two occasions, the boys of the school helped the Town Council in clearing two grounds of tall grass and small bushes. Other projects in the report included fish ponds, piggery units, bee-keeping, grape-raising, banana plantations and reforestation schemes.<sup>61</sup>

The above description of self-reliance projects illustrates the great enthusiasm with which schools went about the implementation of the policy. Since good intentions alone

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<sup>61</sup> Ministry of Education (Tanzania), Report on Self-Reliance Projects in Secondary Schools as at 31/12/1967, Self-Reliance File Folio #5. (Mimeographed.)

without adequate planning are not enough for success, self-reliance projects soon met numerous problems. The circular issued from the Ministry of Education in 1970 commented disappointedly on this issue that "most schools are trying hard, but not very many have had any significant success."<sup>62</sup> The causes of this lack of success were numerous and varied. The following were the main ones. First, the projects were so varied both nation-wide and within the schools that it became practically impossible both for the Ministry of Education and the schools themselves to provide adequate supervision and coordination. Second, there was lack of expertise in most of these projects. Third, the curriculum developers were not given an opportunity to prepare guidelines, supporting materials and advice for implementation. Fourth, teachers were rushed into implementation without professional help, adequate consultation and persuasion. Fifth, students' feelings and the psychological lag in accepting change were not taken into serious consideration. Next, record keeping and honest evaluation of projects were greatly neglected. Also in practice, emphasis was placed more on the economic rather than on the educational aspect of the projects. The quantitative aspects of production were emphasized more than the qualitative ones. Finally, and worst of all, the distortion of the idea of ESR was creeping in. The school farm was being falsely identified with

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<sup>62</sup> Ministry of Education (Tanzania), School Farm as Part of Self-Reliance Activities, Circular to all Headmasters i/c Secondary Schools, 6 February 1970. Re: General File on Self-Reliance Reports, Folio #7, p. 1. (Mimeographed.)

the whole idea of Education for Self-reliance. A school without a farm was judged to have betrayed the policy. Thus some urban schools, regardless of unreasonable waste of time and money, had to go out of their way to find land for farming far away from their urban location. Also, in many instances, the competition for magnitude rather than quality of school farms militated against the educational purpose of the whole exercise.

The Circular of 1970 from the Ministry of National Education, though specifically directed to school farms, was meant to redress the above mentioned mistakes. It emphasized that in order to have good results it was necessary to "apply great skills, plan well and work hard." Five aims of the school farms were spelled out: (1) to instill in the student's mind the idea of being self-reliant; (2) to give students practical knowledge and skills that are of vital importance to the development of the country; (3) to produce good food, which in turn should improve the diet for the students and save school funds; (4) to give the students some physical exercise; and (5) to prevent the students from developing a negative attitude towards manual work. The headmasters were instructed to let teachers have these ideas clearly in their minds and instill them in their students in order to elicit "their full cooperation and willingness to carry through the projects." Four practical suggestions were given regarding the proper running of manual work projects. First, in order to prevent unnecessary failures, schools were advised to "make a small start." Secondly, the participation of students and

teachers was emphasized in these words:

When going to the field they [students] are going there with a particular purpose: to do or to observe something, and not just to spend (waste!) some hours in the field. And they should be shown rather than told what to do, and why it has to be done. The teacher must never be afraid of getting his hands dirty.

Thirdly, the giving of shamba (farm) work as punishment was prohibited. It was said that this would reinforce negative attitudes towards agricultural work and undermine the educational aim of promoting "positive and optimistic feelings about farming." Lastly, the circular urged schools to make imaginative use of local expertise and consult relevant resources both national and regional.<sup>63</sup>

In spite of the above mentioned circular, the situation of manual work projects in schools did not improve significantly in the period 1970 to 1974. Due to the haphazard nature of the implementation, the oppositional culture to the new change, latent among teachers and students, begun to surface in a variety of ways. In order to curb the growing malaise in schools regarding Education for Self-Reliance, the Musoma Resolutions were passed in 1974.

#### Manual Work in the Musoma Resolutions of 1974 and After

Two events, namely, The Seminar on Education in Africa and The Musoma Resolutions, made 1974 a landmark year in the Tanzanian educational development.

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<sup>63</sup> Ibid.

In May 1974, a seminar entitled, Education and Training and Alternatives in Education in African Countries, was held at the University of Dar es salaam. During this seminar, President Julius. K. Nyerere gave a challenging talk on "Education for Liberation of Africa." In this speech, he critically referred to three problems which had still to be faced in Tanzanian Education. These problems included lack of self-confidence to opt for relevant education in spite of international pressure, inability or unwillingness to really integrate education and life, and an exaggerated belief that "academic ability marks out a child or an adult as especially praiseworthy or as deserving a privileged place in society." Specifically, regarding the effort to integrate work and education in Tanzania, the President had this to say:

The second problem is our apparent inability or unwillingness to really integrate education and life, education and production. I am not suggesting that we have made no advances in this direction. Nor am I suggesting that our failure to advance further can be attributed simply to the prejudices of our educationalists. Parents, politicians and workers, as well as educators, are suspicious of, or hostile to, the educational innovations required. But the total result is that few of our schools are really an integral part of the village life, except in the sense that they occupy village children for so many hours a day. And what is true in the village is even more true of the towns. Further, few schools, if any, can really claim that their production makes any large contribution even to their own upkeep, much less to the society in general.<sup>64</sup>

In view of the above criticism on Tanzanian educational

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<sup>64</sup>George Psychas, "Schools for Self-Reliance: Two Tanzanian Secondary Models" (Ed.D. dissertation, University of Massachusetts, 1982), p. 115. Quoted from: Julius K.Nyerere, "Education for Liberation in Africa," (Dar es salaam: Dag Hammarskjold Foundation, 1974), pp. 10-11.

development, a meeting of the National Executive Committee (NEC) of TANU was convened at Musoma in 1974, to have a fresh look on the implementation of ESR in Tanzania. The outcome of the meeting was summarized in the directives which came to be known as the Musoma Resolutions. In order to effectively implement the objectives of ESR, NEC endorsed the following:

- (1) Within three years (by 1977) Tanzania had to achieve Universal Primary Education (UPE); that was twelve years ahead of the original target.
- (2) Students completing Form Six of secondary education had to work and gain practical experience for a number of years before they could be considered for pursuing university studies.
- (3) Productive work had to be an integral part of education in all schools and other educational institutions.
- (4) The excessive emphasis placed on written examination had to be reduced, and students had to be continually assessed on the basis of their progress in the classroom combined with their performance of other functions and the work component of their education.<sup>65</sup>

Resolutions two to four clearly show the great emphasis which the National Executive Committee placed on the integration of work and education. Mbilinyi captures very well the underlying main objective of the Musoma Resolutions.

Education and work were to be united in all education institutions, not only to cover costs to schooling, but also to ensure that youth developed the correct attitude to manual labor as future peasants and workers, and to break down the petty bourgeois arrogance of students in higher educational institutions who would become the future

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<sup>65</sup>Ibid., p. 117. Quoted from "TANU Directive on the Implementation for Self-reliance, November 1974" Musoma Resolutions), in Yusuf O. Kassam, The Adult Education Resolution in Tanzania (Nairobi: Shungwaya Publishers Ltd., 1978), p.103.

bureaucrats and experts.<sup>66</sup>

The Musoma Resolutions provided a new impetus for the implementation of "self-reliance projects" already introduced in secondary schools. In order to push schools to take tough action, a directive was issued from the Ministry of National Education urging schools to aim at meeting 25 percent of their catering expenses. This target of production, in the author's opinion, contributed greatly to the distortion of the objectives of "self-reliance activities." Schools, henceforth, were precipitated into a helter-skelter competition to meet the quantitative requirement of the directive. Instead of the title "self-reliance activities," manual work activities in schools came to be referred to more and more as Uzalishaji Mali (Wealth Production), a title with more of an economic rather than educational connotation. From there onwards economic considerations of manual labor activities in schools tended to overshadow the educational ones. One gets this impression after reading through the circular of 1975 from the Ministry of National Education regarding "Productive Activities in Schools."<sup>67</sup> The circular dealt more with how to organize these activities for greater economic returns rather than showing how these activities could promote the greater concept of Education

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<sup>66</sup>Marjorie Mbilinyi, "Contradictions in Tanzanian Education Reform" in Andrew Coulson, ed., African Socialism in Practice: The Tanzanian Experience (Nottingham: 1979) p. 220.

<sup>67</sup> Ministry of Education (Tanzania), Uzalishaji Mali, December 1, 1975, Self-Reliance File, Folio # 62.



for Self-Reliance. A serious consequence of this was and still is the tendency to equate ESR with manual work activities in schools.

As the haphazard efforts to meet the 25 percent target continued to cause educational alarm among all those interested in education, the Ministry of Education sent a circular in March 1980, giving detailed instructions on how to organize, implement and evaluate "productive activities" in schools, and clarifying the difference between "manual labor activities" and Education for Self-Reliance. The circular pointed out that the concept of Education for Self-reliance was comprehensive, embracing all educational activities in and outside the classroom ("Ujumla wa Elimu yote; nadharia na vitendo") with a definite purpose of making education practical and relevant. Thus "manual work activities" were only a very small part, though a very important one, of the greater policy of ESR.<sup>68</sup> This implied that the

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<sup>68</sup> Ministry of Education (Tanzania), Mwongozo Kuhusu Utekelezaji wa Kazi za Kuzalisha Mali Katika Shule na Vyuo, March 24, 1980. Education for Self-Reliance File, Folio # 168.

". . . Katika sekula hii Wizara ingependa kutoa maelezo kidogo kuhusu tofauti iliyopo kati ya 'Elimu ya Kujitegemea' na 'Kuzalisha Mali'.

Elimu ya Kujitegemea ina maana ya elimu yote tunayotoa katika shule zetu na vyuo vyetu. Kama mnavyoelewa elimu yetu inaunganisha nadharia na kazi. Yaani watoto wetu wanasoma huku wakifanya kazi na pia wanafanya kazi huku wakisoma. Mara kwa mara elimu ya namna hii tumeita 'Elimu ni Kazi' lakini ukweli ni kuwa hii ndiyo maana ya Elimu ya Kujitegemea. Kuzalisha Mali ni sehemu ndogo tu ya Elimu ya Kujitegemea na sehemu hii inahusika na kazi za mikono wanazofanya wanafunzi/wanachuo mara wanapokuwa shuleni/vyuoni. Hivyo hatuwezi tukasema kuzalisha mali peke yake ndiyo Elimu ya Kujitegemea. Elimu ya Kujitegemea ni Ujumla wa Elimu yote: nadharia na vitendo."

success of "manual work activities" had to be evaluated in view of the general aims of ESR.

In spite of the above clarification, going through reports on self-reliance activities in schools, one gets puzzled by how little is mentioned concerning their qualitative aspects. One tends to be skeptical about the praise given to the so-called "best performer schools" when only quantitative aspects of their productive labor are quoted with practically no mention of other intervening educational and environmental variables. In such a process, some schools can be discouraged and others enticed into competitive production just for its own sake. It ought to be remembered that the aim of Education for self-reliance is not to turn students into efficient production tools but to educate them to become intelligent, creative and free producers. An example of this quantitative approach in assessing the success of productive labor in schools may be noticed in the report of 1985 from the Ministry of National Education.

The report of 1985 listed the current productive activities in secondary schools. They were categorized in five groups. First, agricultural projects included cash and food crop plantations, vegetable and fruit gardens, poultry, piggery, cattle-keeping and tree-growing. Secondly, technical projects included carpentry and brick making. Thirdly, among the domestic science projects mentioned were cookery, sewing and canteen-running. Fourthly, "small industries" projects covered envelope-making, printing, soap-making and shoe-repairing. Last, but not

least, commercial projects included running of school-shops and operating milling-machines. The assessment of the progress and success of these projects was summarized as shown in the following table (see Table 4).

The impression one gets from the figures in the table is that manual work projects are making tremendous progress. However, the author would like to caution the reader against such a statistical deception. The success portrayed by statistics should be moderated by taking into account variables, such as manhours involved, the physical environment of the school, special external help provided to the school and the relevant qualitative aspects that legitimize productive labor in schools. These variables were not given proper attention in the reports that the researcher had access to both in the Ministry of National Education and in the schools that were studied. For example, very scanty information was found in these reports regarding attitude of teachers and students towards manual work projects. It was, however, encouraging to find out that now many evaluators of ESR are getting more and more interested in this aspect of work projects in school. The Ministry of Education was conducting a study in this regard while the writer was doing his own study. Since the success and failure of the implementation of the policy to a great extent depends on the attitude of teachers and students, one wishes that a more serious and frank approach could be adopted in evaluating and accounting for the prevailing attitudes in the school community towards manual work activities.

TABLE 4

AN ILLUSTRATION OF THREE WAYS OF MEASURING THE SUCCESS  
OF PRODUCTIVE ACTIVITIES IN SCHOOLS

Way of Evaluation	1981	1982	1983	1984
A. Average productivity per student.	85.00TS	161.60TS	215.15TS	c
B. Percentage of the 25% catering expenses.	10.6%	20.00%	26.40%	29.86%*
C. Profit (less expenses from prod. activities).	3,250,320	6,290,990	8,549,429.05	c

c = not given.

\* = This percentage was not included in the report of 1985, but was obtained by the researcher from the list of Schools' Performance in Productive Activities (1984) in the Ministry of National Education.

Source: Ministry of Education (Tanzania), Kikao cha Tisa cha Baraza la Kumshauri Waziri. 29 Machi 1985. Self-reliance file, Folio #176.

Briefly, in this chapter, an attempt has been made to delve into complex historical factors affecting the ethic of manual work among students in Tanzanian schools, from precolonial times to the present. It has been argued that in precolonial times, in spite of a natural aversion to manual activities, children of traditional education willingly participated in such activities because they perceived the relevance of these activities to community life. This situation was radically changed during the colonial period. Many factors combined to make colonial education anti-manual work, making it difficult for schools to impart to the young the appreciation of manual work. The factors that led

to this alienation included the colonial policies of forced labor, export oriented economy, practical irrelevance of manual work exertion to a better life of peasants and workers, and the hidden curriculum that favored "elitist education," extolled "white-collar jobs" and disdained manual work.

In the immediate post-independence period, educational planners were heavily swayed by the "human capital theory," and with a blind faith expanded the system of education without critically examining the values imparted by such a system. During this period, no significant step was taken to restore the value of manual work in the educational process. Finally, the educational breakthrough came about with the declaration of the policy of Education for Self-reliance in 1967. Since then, effort has been and is still being made to integrate work and education in secondary schools through the "diversification of schools," inclusion of work aspects in school achievement assessment, requiring secondary school graduates to work before joining institutions of higher studies, and introducing manual work activities or "self-reliance projects" in all secondary schools. This study is specifically concerned with the last aspect of that effort. In the latter part of the chapter, a general picture was presented of how 'self-reliance projects' look like and are evaluated. It is hoped that this historical background will contribute to the clarification of the gravity of the problem under study. The following chapter will provide a conceptual frame work and literature review on it.

## CHAPTER III

### REVIEW OF THE LITERATURE

#### Theoretical Perspectives of Manual Work in Education

The issue of manual work in education seems to be crucial in view of the interest it has generated among educational theorists. As a result, a broad presentation of a theoretical perspective on the subject will provide a useful background to the review of the literature and to this study as a whole.

In the interest of brevity, the writer has grouped the vast variety of views on the question into three main categories, namely, Liberal (or Rationalist), Pragmatic and Populist (or Romantic) views. The debate on the subject is a perennial one going back even to the time before Plato. But since this study is not per se of an historical nature, reference will be made to selected educational theorists of modern times with the sole purpose of giving some insight into various theoretical approaches rather than discussing them fully.<sup>1</sup>

The Liberal or Rationalist View. This view is well represented by Mortimer J. Adler, Robert M. Hutchins and Irving

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<sup>1</sup>Modern times cover the period since the Industrial Revolution. The Industrial Revolution had a radical impact on peoples' perceptions on the value and dignity of manual work as expressed in the stereotypes about "white-collar" and "blue-collar" jobs. This has heightened the challenge to educational institutions to educate the young to appreciate manual work.

Babbitt.<sup>2</sup> These authors espouse an aristocratic type of education which consists in indulging in literary studies and mastering ideas and principles found in the "great books." Adler expressed this view of education in these words:

The direct product of liberal education is a good mind, well disciplined in its processes of inquiring and judging, knowing and understanding and well furnished with knowledge, well cultivated by ideas.<sup>3</sup>

This school of thought is opposed to the integration of work and education. It is suggested that vocational preparation ought to be done separately either on the job or in technical institutes after liberal education has been finished. A serious criticism against this position is that it fails to see the liberal function of physical work, namely, to prove, clarify and consolidate ideas and principles acquired in the classroom. It seems also to ignore the other important aspect that work is a crucial element in integrating technology with other aspects of human culture. For example, it is by being practically involved in manual work that a student can appreciate the virtues of

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<sup>2</sup>For further information about their ideas consult the following works. Mortimer J. Adler, "Labor, Leisure and Liberal Education," Journal of General Education 6 (October 1951): 35-45. Mortimer J. Adler and Milton S. Mayer, The Revolution in Education (Chicago: The University of Chicago Press, 1958); also Robert M. Hutchins, "Liberal vs 'Practical' Education--the Debate of the Month," reprinted from The Rotarian, vol. 69, 1946, in C. Winnfield Scott and Clyde M. Hill, eds., Public Education under Criticism (New York: Prentice-Hall, 1954), pp. 55-58; also Irving Babbitt, Democracy and Leadership (Boston: Houghton Mifflin Company, 1924), pp. 188-213; Spanish Character, edited by Frederick Manchester, Rachel Giese, and William F. Giese (Boston: Houghton Mifflin Company, 1940).

<sup>3</sup>Donohue, Work and Education, p. 128.

sacrifice and patience of workers and peasants, the necessity of a social system that is fair to all workers, and the urgency of a workers-oriented development that seeks to lighten the burden of manual workers by improving their quality of life. Indeed, it would seem that an educational system that denies an effective dose of manual work to students is bound to be a failure in its humanistic goals.

The Pragmatic Views. This category covers a variety of views ranging from those of Marxists and Deweyites to those of Religious humanists and UNESCO internationalists. The unifying factor of this medley of opinions is that they all view manual labor as instrumental in the realization of a better social order, a fully developed individual personality or a spiritually integrated person. A short explanation of each will shed some light on these opinions.

Although Marx did not write directly on the nexus between work and education, his views are inferable from his many writings.<sup>4</sup> In Marxist literature the distinction between intellectual and manual work is labeled as a "bourgeois distinction" and is strongly criticized. Marx claimed that this dichotomy was created by the elite classes in their own

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<sup>4</sup>For Marxist ideas on Education read Robert S. Cohen, "On the Marxist Philosophy of Education," in Modern Philosophies and Education, The Fifty-Fourth Yearbook of the National Society for the Study of Education (Chicago: The University of Chicago Press, 1955), pp. 175-214; also James Collins, "Marxist and Secular Humanism," Social Order 3 (May-June 1953): 207-32; Sidney Hooks, Towards the Understanding of Karl Marx (New York: John Day Company, 1933) and From Hegel to Marx (New York: Reynal and Hitchcock, 1936).



interests. They wished to remain as active ideologists who planned life for the rest of a passive multitude whose duty would be to labor in docility. It was the task of communism to eliminate this contradiction in society. It is implied in his writings that the best way to realize this is through the integration of work and education. Both in the critique of the Gotha Program and in Das Kapital he indicated his view of an ideal curriculum which would combine formal classroom instruction, productive labor in agriculture and industry and physical training through gymnastics. Thus commenting on child labor, he stated that "an early combination of productive labor with education is one of the most potent means for the transformation of present day society." It is no wonder then that societies following a Marxist philosophy emphasize so much the importance of manual labor in education. Premier Krushchev addressing the Thirteenth Komsomol Congress in April 1958, insisted that Soviet schools had the duty to produce educated people, equipped with basic scientific formation and the capacity and love for productive labor.<sup>5</sup>

The main criticism against this position is the idolization of manual labor to the detriment of the human personality. Because of a materialistic philosophy Marx denies the non-material element of the human person by dwelling only on the material element which is perfected through manual work. In this

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<sup>5</sup>Donohue, Work and Education, pp. 53-5, quoted from Marx, Selected Works, vol.2, pp. 564-66, 583 and Das Kapital, vol.1, p. 529.

way he contends that "men will enter the plenitude of their humanity as they enter into the plenitude of their labor."<sup>6</sup> The writer would argue that this view atrophies the development of the human person and society as a whole. A wholesome educational process is the one which values and takes into consideration the integrated person and society both in their material and nonmaterial elements. Idolizing manual labor is not likely to be conducive to a balanced educational system.

On Dewey's part, while avoiding the exaggerated view that manual work is the ultimate fashioner and perfecter of human life, nonetheless assigns it an important place in the process of education. These views are appropriately summarized by Donohue.

Human work as Dewey understood it, is really the primary manifestation of this productive and instrumental activity of intelligence. It is to begin with, a response to the problematic elements of existence, for surely there is no problem more consistent than that of preserving life itself. It was in their work, then, that men used the genuinely fecund method of hypothesis and test. The farmer had a field to sow, the carpenter a bench to make, and each was forced to visualize his goal in relation to the means of reaching it. Their strategy was devised in light of the total situation, and if the corn grew or the bench weathered hard usage, those experiences confirmed or corrected the initial forecasts. Here was the scientific method in an unreflective but authentic form, and the sciences themselves, said Dewey, gradually unfolded from just such useful social occupations. . . . Work, in short, besides introducing men to logical method also involves them in those basic social enterprises which alone form sound moral character.<sup>7</sup>

Thus, according to Dewey, manual work activates practical intelligence, is at the root of the "scientific method," and

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<sup>6</sup>Ibid. p. 56.

<sup>7</sup>Donohue, Work and Education, pp. 60-1.

promotes social interaction and cooperation. Consequently in his books, The School and Society, Experience and Nature, and Democracy and Education, he emphasizes the importance of "learning by doing."<sup>8</sup> Though his ideas sound Marxist, he differs from Marx in two main aspects. First, Marx has a society-centered view of manual work in education, that is, as being instrumental to the improvement of the material base of society. Dewey on the other hand, has a child-centered view of manual work in education, that is, being instrumental to the full blossoming of a child's personality. Secondly, Marx and Dewey differ as to the manner of introducing "work activities" in schools. The former advocated the inclusion of manual work and engaging students in formal industry for economic gain. The latter de-emphasized the economic motive while stressing the role of work activities in developing "constructive, inventive and creative power of the mind." Dewey's view is well expressed by Donohue.

In The School and Society he [Dewey] distinguishes work, which focuses on the external result, from occupation which focuses on the related mental and moral states and the growth involved in reaching that result. The work activities in the school program, then, are occupations in this latter sense and are prescribed for the development of children, not for their emolument nor the convenience of future employers.<sup>9</sup>

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<sup>8</sup>For John Dewey's ideas on work and education see his books: Democracy and Education (New York: The MacMillan Company, 1916), pp. 228-42, 293-305; Experience and Nature (Chicago: Open Court Publishing Company, 1925), pp. 121-38; and The School and Society, revised edition, (Chicago: The University of Chicago Press, 1915), passim; and "Learning to Earn: The Place of Vocational Education in a Comprehensive Scheme of Public Education," School and Society 5 (March 24, 1917): 331-34.

<sup>9</sup>Donohue, Work and Education, pp. 91-92, 155.

However, both Marx and Dewey concurred in their materialistic approach to life. The one devoted to the collectivity, the other to human intelligence and both to the "here and now." The spiritual element of human development was neglected and hence the criticism from religious humanists, whose views will be considered in the following section.

Religious humanists insist that work, including manual labor, cannot be understood fully without taking into consideration the religious dimension. For a religious person work has a greater significance than merely being a means of bettering the material conditions of society, securing the future, or perfecting human intelligence. The decision to work implies a moral choice to commit oneself to the fulfillment of a divine plan in one's regard. For example, in the case of Christians' work spirituality is seen as a response to God's command expressed in Genesis for man/woman to "cultivate and tend the garden" in which he/she has been placed by God. Donohue summarizes well the view of Christian humanists as regards manual labor activities.

When a man toils, he is implicated in a congeries of activities not all of which enrich merely the external product. For his own skill grows by intelligent exercise and so do his prudence, wisdom, his courage and patience. He ponders, tests and checks. He knows the joy, as Jean Lacroix said, of bringing true values to life both in himself and in the matter which he transforms. These humanistic values of labor also include its potential as ethical educator and as a factor developing the social capacity in man.<sup>10</sup>

The Buddhists on their part see manual work as a means to purify

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<sup>10</sup>Donohue, Work and Education, p. 155.

human character. It gives human beings a chance to utilize and develop their faculties, enables them to overcome their ego-centeredness by joining other people in a common task, and brings forth the goods and services for a becoming existence. Work properly conducted in conditions of human dignity and freedom blesses those who do it and equally their products.<sup>11</sup> It seems from experience that where a spiritual dimension is added to work a greater commitment results. The writer is persuaded to think that this was one of the contributing factors to the remarkable success of work projects in schools which had a strong religious viewpoint in their organization. These activities were seen as part of their religious duty and perfection.

In the category of pragmatic views, one would also include the eclectic views expressed by UNESCO members regarding the importance of combining work and education. As studies sponsored by UNESCO show, regardless of differences in philosophical and ideological backgrounds, nation-members all over the world have emphasized the necessity of integrating work and education.<sup>12</sup> This opinion was unequivocally endorsed at the UNESCO general conference held in Nairobi in 1978. The conference expressed the

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<sup>11</sup>Gavin Kitching, Development and Underdevelopment in Historical Perspective: Populism, Nationalism and Industrialization (London and New York: Methuen, 1982), p. 93.

<sup>12</sup>Ideas on the topic as expressed by UNESCO members are found in UNESCO Regional Office for Education in Asia and Oceania Bangkok, 1978), Combining Education and Work: Experiences in Asia and Oceania and UNESCO Report, International Meeting of Experts on the Promotion of Productive Work in Education (Paris, France, 24-28 November 1980).

importance of the interaction between education and work as follows:

If it is to make a full contribution to development, education while keeping its own aims in view, must be closely linked to the working world. In this respect, member states in different regions have performed various experiments involving the inclusion of productive activities in educational activities. This inclusion of work in the very content of education finds its chief justification in the training value it affords, not only with regard to the acquisition of knowledge and know-how but above all from an ethical standpoint, since it emphasizes the profound dignity of productive work.<sup>13</sup>

In the papers presented by experts from various countries on the same topic at the Paris Conference in 1980, a variety of approaches in the implementation were manifested. The most remarkable difference in the approaches worthy of note here is between marginal and radical conceptualizations of the role of manual work in education. Those countries with a marginal approach perceive the integration of work and education as a means to solve the problems of youth unemployment, school dropouts and children of the poor who cannot afford higher education. Those countries with a radical approach see the integration of work and education as necessary to a fundamental change in the relations of production in society.<sup>14</sup> This is not the place to delve into details of those approaches. What unites them all, so far as they can be labeled pragmatic, is their vision of an educational policy which integrates work and education as a necessary, though not sufficient, means of coping

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<sup>13</sup>UNESCO Report (1980), pp. 6-7.

<sup>14</sup>Ibid., pp. 32-100.

with the problems of national development, both in underdeveloped and developed countries.

The third category of views is that of the populists. Mahatma Gandhi and Mao Tse Tung's ideas are quite representative of this group. The writer is using the word "populist" in the broad sense to cover those ideas that romanticize peasant life and traditional values, and see in the appreciation and participation in manual work the key to authentic development.<sup>15</sup> Gandhi believed that peasants were the source of knowledge that could transform the world view for the better. Mao espoused peasantism tainted with Marxism whereby he envisioned the final victory of peasants in the class struggle against the landlords and the capitalist class.<sup>16</sup> Both Gandhi and Mao developed their ideas about the role of manual labor in education in peasant contexts. Gandhi's ideas grew up from his experimental "Tolstoy Farm" in South Africa. When he returned to India, he was convinced that manual labor had to be an integral part of the curriculum in order to "regenerate India's village economy,

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<sup>15</sup>For a fuller analysis of "populism" see Gavin Kitching, Development and Underdevelopment in Historical Perspective: Populism, Nationalism and Industrialization (London and New York: Methuen, 1982).

<sup>16</sup>For more details regarding Gandhi and Mao's ideas see the following works. N. V. Thirta, "A comparative Study of Gandhi's Educational Ideas and the Government of India's Basic Education Program: A Study in Values," (Ph. D. Dissertation, Stanford University, 1959). Raghavan N. Iyer, The Moral and Political Thought of Mahatma Gandhi (New York:Oxford University Press, 1973). John N. Hawkins, Mao Tse Tung and Education: His Thoughts and Teachings (Hamden, Conne.: The Shoestring Press, 1974). Susan L. Shirk, "Work Experience in Chinese Education," Comparative Education, No.14, 1978, pp. 5-17.

develop in India's children a deeper understanding of India's cultural roots, motivate children to relate book learning to life in society, and destroy the invidious caste distinctions."<sup>17</sup> Also in the case of Mao Tse Tung the Yennan experience in the 1930's played a big part in formulating his ideas about the importance of manual work in education. Mao, drawing from his Yennan experience and Marxist thinking of relating theory to practice, attributed two roles to manual work in schools. First, it was the only hope of preparing the young to help in breaking the vicious circle of poverty in Chinese rural life. Secondly, it was the only way to develop a truly socialist society in which everyone participated both in mental and manual work and theory was continually dialectically related to practice.

Gandhi's philosophy influenced India's 1937 First National Conference on Education which adopted the resolution that:

The process of education throughout this period should centre around some form of manual productive work, that all other abilities to be developed or trained should, as far as possible, be integrally related to the central handicraft chosen with due regard to the environment of the child.

The role of productive work was envisioned as being four fold. Psychologically, it would relieve a child from the tyranny of a purely academic and theoretical instruction, promote a balanced approach to the intellectual and practical elements of experience and educate the body in mind in coordination. Socially, too, productive labor would serve to break down the existing barriers

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<sup>17</sup>Mathew Zachariah and Arlene Hoffman, "Gandhi and Mao on Manual Labor in the School: A Retrospective Analysis," International Review of Education, Vol. 31, 1985 p. 265.



of prejudice between manual work and intellectual workers. Economically, productive labor in education would enhance the productive capacity of workers. Finally, educationally, by means of such education, greater consciousness and reality could be given to knowledge so as to make it more related to life, and its various aspects correlated to one another.<sup>18</sup> Gandhi's ideas were tried out, with limited success in the Basic Schools (as contrasted to traditional schools with an academic curriculum), and were abandoned gradually by 1954 when the thrust to industrialization ran counter to Gandhi's idealism of peasant life.

The ideas of Mao were first put into practice in Yen-an Province in the 1930s. By the end of this decade all the schools in Yen-an had workshops and farmland. Students spent mornings in classrooms and afternoons and evenings in productive labor activities. The products made by students were sold on an open market and the money earned was for the support of the school.<sup>19</sup> Other attempts to make manual work an essential component of the curriculum were attempted both during the Great Leap Forward (1958-60) and The Cultural Revolution (1966-1976). After the death of Mao Tse Tung in 1976, there was a de-emphasis on productive labor in schools due to the drive for competitive education that would correspond to the demands of the "Four

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<sup>18</sup>Ibid., p. 271.

<sup>19</sup>Donald J. Munroe, "Maxims and Realities in China's Educational Policy: The Half-Work, Half-Study Model," Asian Survey 7 (1967): 255-256.

## Modernisations" of China.<sup>20</sup>

Of the three philosophical approaches described above in regard to the role of manual work in education, the writer is strongly persuaded that the populist approach fits well with the situation in Tanzania. Nyerere's philosophy of development is based on a deep appreciation of the values of traditional society. He maintains that though they were interfered with and even distorted during the colonial episode, they were not totally obliterated and are still influential, especially in rural areas. He singles out three basic principles on which the Tanzanian philosophy of development is based.

1. Mutual respect: Each member of the family recognized the place and the rights of the other members, and although the rights varied . . . there was a minimum below which no one could exist without disgrace to the whole family.
2. Sharing of property and income: all the basic goods were held in common, and shared among all members of the unit. There was an acceptance that whatever one person had in the way of basic necessities, they all had; no one could go hungry while others hoarded food and no one could be denied shelter if others had space to spare.
3. The obligation to work: The work done by different people was different but no one was exempt. Every

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<sup>20</sup>The "Four Modernizations of China" allude to the program adopted in 1978 by China's Fifth National People's Congress. This program, was envisioned by Chou En Lai in 1975 and was developed by Deng Xiaoping. It seeks to modernize agriculture, industry, science and technology, and national defence. Of the four modernizations, the modernization of science and technology is regarded as a prerequisite of the other three. This emphasis on science and technology has direct consequences on current educational orientation in China.

See also: Chu-yuan Cheng, China's Economic Development, Growth and Structural Change, (Colorado: Westview Press, 1982), pp. 48, 276.

member of the family, and every guest who share in the right to eat and have shelter, took it for granted that he had to join in whatever work had to be done. Only by universal acceptance of this principle was the continuation of the other two made possible.<sup>21</sup>

From the above principles, manual work in education is seen as essential for the revitalization of traditional values and promotion of production-based development. One caution, which is often cited against populists, is that they tend to override idealize traditional and rural values to the extent of overlooking the prevailing obstacles in the implementation of populist policies. For example, in the case of the ideal of integrating work and education, populist tendencies may lead to the underestimating or ignoring completely the role of such variables as appropriate curriculum guides, adequate facilities and trained teachers, interference of old habits and political hypocrisy. These factors played a part in the partial failure of Chinese and Indian experiments.<sup>22</sup> It is intriguing to note that the problems that beset populist reforms elsewhere resurface also in the Tanzanian case.

As a concluding note to the above brief exposition of the different perspectives on manual work in education, the writer suggests that a synthetic approach, combining the good elements of both the pragmatic and populist approaches, is preferable. Such an approach, while respecting the cultural, socio-ethical

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<sup>21</sup>Julius K. Nyerere, Freedom and Socialism: Uhuru na Ujamaa (New York: Oxford University Press, 1968), pp. 338-9.

<sup>22</sup>Zachariah and Hoffman, "Gandhi and Mao on Manual Labour in School," pp. 276-280.

context of the people, would frankly and critically appraise, in order to continue or discontinue, individual projects of integrating work and education in view of the overall aim of educational reforms, namely, the attainment of competitive quality education.

### Inclusion of Manual Work in Tanzanian Secondary Schools

The Tanzanian educational experiment of integrating work and education has provoked great interest among educational researchers both from within and from without the country. Although most of the studies deal with the implementation of the wider concepts of either "Education for Self-reliance" or "Integration of work and education," they make indirect observations relevant to the topic of this study. This section of the chapter attempts to review that kind of literature. In this endeavor, the writer considers the findings of Anza A. Lema, Simon R. Nkonoki, George Psychas, Donatus A. Komba, Marjorie Mbilinyi, Philip J. Foster, Tedd L. Maliyamkono and Margaret E. Sinclair to be of special relevance.<sup>23</sup> In the following section,

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<sup>23</sup>Anza A. Lema, Education for Self-reliance: A Brief Survey of self-reliance activities in some Tanzanian Schools and Colleges, (University of Dar es salaam, Institute of Education, 1973). Simon R. Nkonoki, "Education for Self-reliance: An Analysis of Nyerere's Philosophy of Education and its Implementation in Secondary Schools," (Ph.D. dissertation, University of Dar es salaam, 1977). George Psychas, "Schools for Self-reliance: Two Tanzanian Secondary Models," (Ed. D. dissertation, University of Massachusetts, 1982). Donatus A. Komba, "The Integration of Education and Work in Tanzania: A Clarification of the Policy Rationale and an Exploration of its Implications for Implementation and Evaluation," (Ph.D. Dissertation, Columbia University, 1980). Marjorie Mbilinyi,

the findings and observations of the above and relevant others will be analyzed and discussed.

Lema was the first pioneer to look at the state of "self-reliance projects" in Tanzanian schools in 1972. His aim was to try and assess the extent to which students in schools and colleges were responding to the idea of utilizing manual work projects introduced in schools to learn being self-reliant and appreciate the dignity of manual labor. To achieve his aim, he conducted an opinion survey. One thousand four hundred respondents, including pupils, teachers, parents, politicians, and education administrators, were interviewed. His findings are published by the Institute of Education in the book A Brief Survey of self-reliance Activities in some Tanzanian Schools and Colleges. Two major findings are worthy of mention here. First, it was discovered that there was a great deal of misunderstandings regarding the policy. Some implementors tended to equate "Education for Self-reliance" with shamba work (work on the farm). Many of the projects could not achieve their objectives because they were not carefully chosen and were badly administered. Some students in private schools thought that self-reliance meant the ability to pay for one's education. A student

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"Contradictions in Tanzanian Educational Reform," in Andrew Coulson, ed., African Socialism in Practice: The Tanzanian Experience (Spokesman, 1979), pp. 217-227. Philip J. Foster, "Education for Self-reliance: A Critical Evaluation," in Richard Jolly, ed., Education in Africa (1968), pp. 81-101. T. L. Maliyamkono, The Unproductive School, (Dar es salaam: Africana Publishers, 1982). Margaret E. Sinclair, "Introducing Work Experience Programmes in Third World Schools," Prospects 7 (1977): 362-78.

from a private school commented as follows: "If our fathers pay direct fees for our education, then why should we be expected to do self-reliance activities. We pay enormous school fees. We are self-reliant. We do not need to learn that in school." Secondly, Lema's study did show that colonial "die-hard" attitudes toward manual work were still strong. Farm work was still associated with poverty and, therefore, could not be appreciated by students who perceived secondary education as a means of escaping poverty conditions. The attitudes of both parents and students were still elitist, perceiving secondary education not as terminal but as a step to higher education. In his recommendations Lema noted that blind implementation of the policy was not achieving anything. He suggested that emphasis had to be placed on a careful choice of work projects and their proper administration.<sup>24</sup>

Lema's background as a longtime researcher at the Institute of Education of the University of Dar es salaam adds to the credibility of his findings. However the study suffers from two shortcomings. On the one hand, it was conducted five years after the policy had been launched, which makes it unrealistic to expect any significant change of attitudes among students. On the other hand, the study was not sufficiently comprehensive in its approach. Of the twelve questions used for the survey, three were concerned with skill-learning and the rest were about the acquisition of "socialist attitudes." Thus the other aims of

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<sup>24</sup>Lema, Education for Self-reliance, pp. 6-7, 14, 42-43. See also Lema, "Education for Self-reliance: Old Attitudes Die Hard," Studies in Curriculum Development (1973): 29-46.

"self-reliance activities," such as alleviation of educational expenses, merging of theory and practice and integration of school and community, were not given adequate attention by the research instrument. In spite of the above remarks, Lema's findings were in many respects illuminating and are important for later researchers in checking whether the reality described by him has changed or not.

The next evaluation study of "manual work projects" was done by Ruth Besha in 1973. Although her study was concerned with the primary school level, her findings are complementary to those of Lema. She examined how the policy was affecting some schools and villages in the two districts of Bagamoyo and Rufiji. In her tentative conclusions she remarked, like Lema, that negative attitudes towards manual work were not yet changed. Regarding the imparting of skills needed for rural development, she noted that this was not being achieved because in most cases manual work activities were being undertaken mechanically with no significant effort made to teach pupils relevant skills. She also pointed out that in most cases "self-reliance activities" were divorced from academics -- the aim of merging theory and practice was far from being achieved. She was not impressed at all with the economic aspects of the projects since their yields were very poor due to poor methods of work. Last but not least, she concluded that the policy would not succeed in changing the pupils' attitudes unless villages and communities around changed their work habits and

attitudes.<sup>25</sup> Although Besha's study is limited by its narrow scope (a few schools in two districts) and the premature evaluation of attitudinal change, her findings are intriguing because they are based on the observations of the concrete reality of schooling itself and on a more comprehensive evaluation strategy.

In 1976, the work of Tedd L. Maliyamkono added another piece of contribution to the evaluation of "self-reliance projects." Admitting that it was difficult to measure other aspects of the policy, he confined his research to the assessment of the economic aspects of the inclusion of manual work in schools. He used a quantitative approach in his study, and the empirical evidence he obtained did not show a favorable picture regarding the contribution of self-reliance activities in offsetting the costs of secondary education. For example, he noted that "the 1974-75 production ability, as represented by TS 65.55 per student, offset the total expenditure on secondary education for that year by only 2.5 percent."<sup>26</sup> This must be evaluated against the ambitious target set by the government, of 25 percent self-reliance through productive labor. One of the most debated findings of his study was that productive efforts in secondary schools had a neutral impact on academic performance. Maliyamkono

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<sup>25</sup>Ruth Besha, "Education for Self-reliance and Rural Development: Based on Study of Some Schools and Villages in Bagamoyo and Rufiji Districts," (University of Dar es salaam: Institute of Education, 1973), pp. 5-6, 17-27.

<sup>26</sup>Maliyamkono, The Unproductive School, p. 50.



argued as follows:

A comparison of academic performance and productive work efforts shows no relationship. The expected contrasts and similarities are that either the schools that produce more perform better in examination results, or that schools that produce more tend to perform worse in examination results. Inferences may be advanced, therefore, in the absence of the expected relationship, that what schools do academically is totally unrelated to what they do in their present productive efforts (assuming examination results to be an accurate measure of academic achievement).<sup>27</sup>

Maliyamkono's study is intriguing in that it raises the debate on both the real economic worth of self-reliance projects and the impact on the quality of academic performance. As can be gleaned from the interviews of officials in the Ministry of National Education, conducted by the writer, the dominant opinion is that indeed there exists a positive relationship between productive efforts and academic performance. These officials stated that schools with better records of "self-reliance activities" had also better records of academic performance. Obviously, the conclusions of both Maliyamkono and the officials of the Ministry of Education are based on a narrow interpretation of academic performance and the value of self-reliance activities. Academic performance is narrowly reduced to examination performance, and only "cash value" is considered in the evaluation of manual work projects in schools. Indeed, the question raised by Maliyamkono still needs further investigation from a broader perspective of the aims of productive labor in schools and desirable academic excellence.

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<sup>27</sup>Ibid., p. 52.

The findings of Maliyamkono and Muganyizi stimulated the Institute of Education to send out its own team into secondary schools to make its own evaluation of the situation.<sup>28</sup> In 1977, the Institute of Education launched a project under the leadership of Lema to evaluate the economic achievements of self-reliance activities in secondary schools. In this endeavor, forty-one secondary schools (one third of the total) were surveyed. Special attention was paid to economic achievements of self-reliance activities and their relationship to schools' attitudes and available resources, such as land, tools and consultancy services. The research tool used was the aptitude/opinion scale. Three major findings from this study deserve mention here. First, as far as the economic objective was concerned, it was found out that in the years 1970-75, the schools surveyed were able to cover only 3 percent of their recurrent expenditure. In this aspect, the study resembled that of Maliyamkono. It was also observed that this low performance was due to the lack of commitment and the know-how in the implementation process. As far as the politico-ideological aim of productive labor was concerned, the study did show that, in attitudes, students and teachers still valued academic work more than productive work. Students' participation in the

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<sup>28</sup>L. Muganyizi, "Implementation and Usefulness of self-reliance in Schools: Findings of Research carried out in Bukoba District in May and June 1975," Papers in Education and Development, No.2 (May 1976), pp.97-120. This was a small scale and time-limited study. Results were quite similar to those of Maliyamkono.

planning of manual work activities was still poor. Finally, the research team reported that the integration of self-reliance activities and classroom was far from being realized. Little or no effort was being made to relate classroom work and manual work activities and vice versa. Dualism between academic work and manual work was still very much pronounced.<sup>29</sup>

The findings of this research team are worthy of being taken into consideration provided two cautions are kept in mind. The team focused on just three objectives of self-reliance activities, namely, the economic, politico-ideological and politico-academic. The objectives of integrating school and community, and imparting skills for rural and urban development were not investigated. Also the difficulty implied in the measuring of attitudes using a questionnaire makes one cautious in consenting to the conclusions presented. There is a need to compare the findings of this study with those of other similar studies in order to render them more tenable.

Another study which deserves special mention is that of Simon R. Nkonoki, which came out, as a Ph.D. dissertation, in February 1977. The data used in the dissertation were collected from sixteen secondary schools between the years 1971-1975. Nkonoki used both participant observation and a structured questionnaire which was administered to 332 students. He

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<sup>29</sup>A. Lema et al., Report of Secondary Education Project: Economic Achievements of Education for self-reliance in Tanzanian Secondary Schools (University of Dar es salaam: Institute of Education, 1977).

attempted a quantified study of the impact of ESR in Tanzanian schools, with special attention to students' attitudes. Although his study was concerned with the evaluation of ESR in general, it has some specific findings regarding self-reliance activities.

The findings regarding the economic aim of manual work in schools were not encouraging. By computing the figures of economic returns from these projects for the years 1970-1975, he arrived at this conclusion:

Taking the average annual recurrent expenditure per secondary school student to be Tsh. 2,000.00, the contribution per student is only about 1.8 percent of the current expenditure. The implication of this is comparable to that of the findings of the Evaluation Team of the Institute of Education which, on the basis of forty-one secondary schools, estimated the contribution to be only three percent per student.<sup>30</sup>

As for the politico-ideological aim of these projects, namely, the fostering of socialist attitudes towards manual work, Nkonoki came to some disturbing findings. In some schools he noticed a false equation of ESR with manual toil; "there has been a misleading impression created in some schools that the policy of Education for Self-reliance is nothing but the toil and sweat in the farm [or shamba]." The study also revealed that the actions of teachers did show that they still preferred the academic curriculum to the integrated one. Nkonoki regarded teachers' attitudes as a great obstacle to the success of the policy. He

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<sup>30</sup>Simon R. Nkonoki, "The Implementation of Nyerere's Philosophy of Education for Self-reliance in Secondary Schools," (University of Dar es salaam: Undated Paper in the Department of Development Studies), p. 7. Institute of Education, Report of Secondary School Project, (mimeo), (University of Dar es Salaam: Institute of Education, 1977), p. 41.

was surprised with the finding that elitist aspirations among students were still very strong. His study showed that 65 percent of the students interviewed aspired for university education, contrary to ESR's objective of making secondary education terminal.<sup>31</sup> As regards the acquisition of skills and the merging of theory and practice, the findings of the study were also disappointing. After making comparisons of yields per acre for schools and peasants, Nkonoki came up with the following conclusion:

What is done in classes is not integrated with what goes on outside classes; otherwise the average agricultural yields per acre would not have been so low for schools where the value and importance of early planting, manuring and weeding are studied. In fact, in some schools, we have noted, agricultural efficiency, that is yields per acre, is lower than the average Tanzanian peasant farmers' performance who paradoxically are supposed to learn good crop husbandry from the schools.<sup>32</sup>

Another observation from the study was that the attitudes of the larger society and its reward system were the greatest obstacle in the implementation of the policy. Nkonoki states that "it is hypocritical to expect secondary school students to change drastically when they themselves see that the attitudes and working relationships in society itself have not changed significantly." And, finally, on a positive note, it is remarked

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<sup>31</sup>Nkonoki, "Education for Self-reliance: An Analysis of Nyerere's Philosophy of Education," pp.418, 51-4, 404, 353.

<sup>32</sup>Nkonoki, "The Implementation of Nyerere's Philosophy of Education," pp. 5, 21. See also Nkonoki, "Education for Self-reliance," p. 325: "Agricultural production in Secondary Schools is very crude. . . . it neither attempts to merge scientific knowledge and practice nor does it help peasants living near secondary schools to see an example of good crop husbandry."

from the study that although "the contemptuous feeling that regarded manual work as being below the dignity of a person may still have not disappeared completely, it is dying out gradually."<sup>33</sup>

Nkonoki's work is significant due to its methodological approach and the invaluable experience of the author, a former principal of a prominent secondary school and a renowned scholar at the Institute of Development Studies of the University of Dar es salaam. However, two caveats must be mentioned concerning his work. First, although Nkonoki addressed adequately the issue of attitudes, it should be remembered that measuring attitudes from a structured questionnaire suggests some doubts. There was indeed a real danger of basing attitudinal quantification on expected answers, considering the fact that Tanzanian secondary school students are highly politicized. For greater reliability, therefore, there is a need to compare these findings with findings of other similar studies. Secondly, the substance of the data used in Nkonoki's study was collected during the years 1971-75. Considering the fact that attitudes take a long time to change, Nkonoki's attitudinal evaluation was a little too premature. Indeed, now after twenty years of the policy in practice, it appears more justifiable to attempt evaluating attitudinal changes in schools.

Two other studies, relevant to the topic under study, are

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<sup>33</sup>Nkonoki, "Education for Self-reliance: An Analysis of Nyerere's Philosophy of Education," p. 50.

those of Donatus A. Komba and George Psychas. Komba's work, The Integration of Education and Work in Tanzania, was presented as a Ph.D. dissertation at the University of Columbia in 1980. It is a superb work regarding the philosophical aspects of the rationales for the policy and its implementation. It has a broader perspective of work, including reproductive work such as farm work in schools; productive work like craftwork and action or social work (e.g. drama, poetry, music, etc.). He looks at integration of work and education both in school and at the place of work. His main objective was to give a conceptual framework that could be used in planning, carrying out and evaluating the implementation of education/work integration aspect of the ESR.<sup>34</sup> Indeed, this is a valuable work as far as his objective is concerned. The flaw in this work is that it is chiefly based on analytical documentary research. The author did not make a field study for this work and, consequently the impact or input of the praxis may be lacking in the proposed conceptual framework.

More directly related to this study is the work of George Psychas entitled "Schools for Self-reliance: Two Tanzanian Secondary School Models." His study focused on two schools: Weru Weru Secondary School in Moshi District and Nangwa Community Secondary School in Hanang District. In his estimation, these two schools appeared to be meeting the objectives of Education for Self-reliance and thus served as models of ESR. The method he

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<sup>34</sup>Komba, "The Integration of Education and Work in Tanzania," p. 164.

used was a combination of documentary analysis, extensive interviews and his five-year experience as a secondary school teacher in Tanzania. Besides other aspects of ESR, he paid special attention to self-reliance projects, which are a "highly visible and cosmetic response to the demands of ESR-reform in Tanzanian schools."<sup>35</sup> He points out clearly the reason that made the introduction of manual work in schools imperative.

Students were neither willing nor expected to engage in any job which might involve physical labor or to engage in any work which might be uncomfortable or unpleasant. Most students and educated people did not think of their abilities to do both mental and manual work as being related to the needs of their people in the villages.<sup>36</sup>

Such attitudes were supposed to be changed by the inclusion of manual work in the curriculum. Psychas examined the praxis of the policy in the aforementioned two schools. His evaluation of the situation was generally positive.

As far as Weru Weru Secondary School was concerned, Psychas concluded that "self-reliance projects, the school shambas (farms), student government meetings, curriculum, work-projects, and community relations all have been created and are operated within a well-considered set of written objectives." He suggested that the success of the implementation lies in the fact that the school's administration has been willing and indeed has dared to interpret the government policy for itself.<sup>37</sup>

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<sup>35</sup>Psychas, "Schools for self-reliance," p. 164.

<sup>36</sup>Ibid., pp. 204, 212.

<sup>37</sup>Ibid., pp. 254-55.



The findings at Nangwa Community Secondary School were also generally positive. Psychas' report regarding students' attitudes towards manual work notes that:

The students have realized that self-reliance work is essential to the running of the school. They accept it in rhythm with, and not in substitution for, the academic curriculum. Perhaps they also see it as a preparation for their future life. Whatever the case, Nangwa students do an enormous amount of work with a minimum of difficulty and complaint.

psychas goes on to say that "the attitudes and skills learned in doing self-reliance projects at Nangwa represent a case of learning Self-reliance, the goal of Nyerere's policies and the government's resolution and directives." Economically, Nangwa was evaluated as doing an excellent job. It was rated 60 percent self-reliant in food (the government target is 25 percent and usually 20 percent is considered very good) and 100 percent in all other aspects except teachers' salaries. Academically, however, as the Headmistress put it, they were still facing a dilemma of trying to find a balance between "overeducating them [students at Nangwa] and then they will leave the villages, and undereducating them and then they will not be of much value." Nangwa was found to be a good model of integrating the school and community, right from its inception to the day of running it. Psychas again emphasizes the role of leadership for the success at Nangwa. Under this aspect two factors were crucial. First was the dedication of the Maryknoll Sisters, as manifested by their willingness to take equal salaries with other teachers regardless of their higher qualifications. Secondly, the special support

from the President gave the Maryknoll Sisters considerable leeway in choosing how to run the school. In spite of the above favorable picture, Nangwa Community Secondary School had its share of problems: local teachers, some parents and officials of the Ministry of National education doubted this new approach to education. One Ministry official expressed his strong opposition to the Nangwa experiment in these words: "This is not a real school! You are not following the syllabus or preparing your students to go on. You are failing these students. The parents expect more from you."<sup>38</sup>

The findings in Psychas' study are indeed enlightening and worthy of consideration. One, however, needs to be cautioned about the sample that was studied. Weru Weru and Nangwa Community Secondary Schools, both girls' schools, are special in many ways. Weru Weru was started in 1962 by the Irish Sisters of the Assumption. This school never experienced operating under direct colonial rule. Although the school was taken over by the government in 1970, the dedicated leadership of the Assumption Sisters was successfully carried on by Maria Kasindi Kamm, who remains headmistress of the school to the present (1987, as of this writing). Weru Weru has not suffered frequent changes of leadership like other schools. The stability of leadership is an important factor for the success of that school. Moreover, the Headmistress of Weru Weru has always had great support from the Ministry of Education and other Ministries. This may be due to

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<sup>38</sup>Ibid., pp. 311, 313-14, 315, 302, 276.

the school's history of excellent performance which attracts influential government people to send their children there, thus fostering a special relationship with the school. The writer recalls a casual comment, while on his research, from a government official that when Weru Weru has a major problem, the Headmistress may call directly to the relevant ministry and the problem will immediately be taken care of. Psychas also noticed a special cooperative working relationship between Nangwa's Headmistress and the Ministry of National Education.

Nangwa Community Secondary School had also several advantages over the other ordinary secondary schools. It was started in 1976 with special support from the President, Julius K. Nyerere. The Maryknoll sisters gave it a solid start both by their dedicated leadership and financial aid from overseas. The school's site and surrounding community were carefully chosen to suit the requirements of ESR. Obviously, not many schools in Tanzania have the same advantages as Weru Weru and Nangwa. Thus, the study should be seen as dealing with a very special kind of school. For a more balanced view of the success and failure of the policy under discussion, the findings of Psychas would have to be compared against findings of case studies of average Tanzanian secondary schools.

This review of the literature would be seriously incomplete without mentioning the views of a group of scholars who have demonstrated sustained interest in Tanzanian educational reforms, especially as far as the integration of work and education are

concerned. These scholars include Philip J. Foster, Marjorie Mbilinyi, G.R.V. Mmari and Margaret Sinclair. Mbilinyi and Foster approach the evaluation of the Tanzanian experiment from opposed ideological perspectives. The latter from a liberal-Capitalist and the former from a neo-Marxist socialist perspective. Mmari is an experienced Tanzanian researcher who has collaborated with the World Bank in assessing the success and failure of ESR. Sinclair on the other hand is a comparative international educator who is interested in the alternative approach to education in Tanzania. Sinclair, who carried out a comparative study of work related schooling in India and Sri Lanka, currently at the Institute of Development Studies of the University of Sussex, has written extensively on work-experience programs in the Third World. Briefly, the findings of the above will be mentioned in the section that follows.

Foster has consistently maintained a pessimistic view of the experiments to make manual work projects part of the secondary school curriculum. Based on his research in Ghana and the Ivory Coast, in a much quoted 1965 article, "The Vocational School Fallacy," he advanced the idea that young people in developing countries did not despise manual work per se, but they were clever enough to perceive that manual work was unrewarding given the existing societal structures. He argued that the crucial factors determining positive attitudes toward manual work did lie outside rather than inside the school. Hence, work projects in schools intended to foster these were bound to fail as long as

the institutional framework of the society remained the same.<sup>39</sup> He expressed the same ideas in 1969 in his article on a critical evaluation of Tanzanian Education for Self-Reliance. He stated that students "do not usually disdain manual or agricultural work provided it is linked to real and financial opportunities." He argued that it was more reasonable to concentrate on raising the farmer's productivity rather than the school's productivity. Specifically referring to Tanzanian students, he had this to say:

Whether we like it or not, the Tanzanian Secondary School pupil is already in one sense a member of the elite, oriented to university or further studies and it is not likely that many are interested in agricultural work, at least in a farming capacity. . . . Under these circumstances, the occupational mobility of secondary school pupils makes nonsense of an attempt to introduce agricultural education with limited vocational aims.<sup>40</sup>

Likewise, in 1984, Foster commented on Columbian and Tanzanian Studies of the efforts to integrate work and education. He maintained the same position. He argued that work projects in schools have failed to bring about significant desirable attitudinal outcomes among students, mainly because they are based on a wrong assumption that "curricular experience exerts a powerful independent effect on labor market outcomes." He challenges the very idea of the superiority of an integrated

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<sup>39</sup>Philip J. Foster (1965), "The Vocational School Fallacy in Development Planning," in Jerome Karabel and Albert H. Halsey eds., Power and Ideology in Education, (New York: Oxford University Press, 1977), pp. 363-64.

<sup>40</sup>Philip J. Foster, "Education for Self-reliance: a Critical Evaluation," in Richard Jolly, ed., Education in Africa: Research and Action (Nairobi: East African Publishing House, 1969), pp. 93, 96.

curriculum over the conventional academic curriculum, especially in a poor country like Tanzania which lacks the resources and organizational infrastructure to introduce large-scale innovations implied in the integration of work and education.<sup>41</sup>

While the remarks made by Foster are salient, a caveat, however, is necessary regarding his views. Implicit in his remarks is a modernization-objectivist-rationalist approach in evaluating the Tanzanian experiment. He seems to defend the conventional western-style academic curriculum and is suspicious of alternative experiments. He does not seem to consider the time factor in his evaluation--it is too early to conclude that the experiment has been a total failure. Moreover, since failure and success are relative terms, it is important to discern from whose perspective Foster was evaluating Tanzanian efforts. The evaluation paradigm that is intent only on quick, objective and economic results runs the danger of ignoring the intangible results of the experiment, especially the world vision regarding manual work that has been created among students and people of Tanzania as a whole.

Mbilinyi, on the other hand, looks at the Tanzanian experiment from a socialist-marxist perspective. She sees contradictions in the implementation of the policy. Bourgeois bureaucrats seem to pay lipservice to the policy, but in practice

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<sup>41</sup>Philip J. Foster, "Some Policy Implications of the Tanzanian and Columbian Studies," A Paper presented to the World Bank, Education and Training Department, 24 September 1984. Paper is numbered.

they do all they can to send their children to schools with environments that promote elitism. Teachers do not join students in manual work but only supervise them. In spite of the rhetoric, "manual work in order to shed intellectual arrogance, to taste the drudgery of the peasant or the productive worker by organizing students for periodical full participation in a factory or village work has not been introduced in secondary schools." As far as integrating theory and practice, she observes that "self-reliance activities are isolated from academic coursework in the time-table and are not designed to promote meaningful living." She also points out the contradiction of emphasizing the involvement of teachers and students in manual work activities, while leaving out employees of other sectors.<sup>42</sup>

Mbilinyi's findings do merit attention because they are based on solid "grassroots" research. The points she raises need careful consideration. However, though she has an ideological perspective different from that of Foster, both researches methodologically exhibit leanings towards a rationalist, objectivist and deterministic model. Thus, Mbilinyi seems to evaluate the Tanzanian experiment on the basis of conformity with principles and expectations of scientific socialism. Nevertheless, there exists the danger of being blinded to other aspects of reality due to a strong ideological commitment directing her efforts.

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<sup>42</sup>Marjorie Mbilinyi, "Contradictions in Tanzanian Education Reform," in Andrew Coulson, ed., African Socialism in Practice: The Tanzanian Experience (Spokesman, 1979), pp. 220-226.

Mmari attempted to show the success and failure in the implementation of Education for Self-reliance. He noted that "the rationale of linking school with work was no longer questionable in Tanzania." He also adds that, economically, schools have become more productive, producing for example, in 1974-5, food or manufactured articles worth over 7.7 million Tshillings, when TS 8.4 was equivalent to one U.S. dollar. However, he admits and tries to explain why the experiment has not yet succeeded to produce a "new person" with a radical positive orientation towards work.<sup>43</sup> Indeed, Mmari's comments and experience are quite valuable to the study of the problem under investigation. However, now and then he seems to be influenced by the nationalist approach of legitimating the national policy. An example of such questionable assertions is the statement that, "no one questions the rationale for linking school with work any more. It is now accepted as the normal thing to do."<sup>44</sup> Certainly for anyone with experience in work projects in Tanzanian schools, such a statement would appear to be inspired more by nationalist wishful thinking rather than by the real practice in schools. For Tanzanian researchers in particular, the need to go beyond nationalism in order to discover more about the reality of Tanzanian schooling can hardly be overestimated.

Sinclair's studies on work-experience programs in Third

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<sup>43</sup>G. R. V. Mmari, "Attempts to link school with work: The Tanzanian Experience," Prospects 7 (1977): 383-386.

<sup>44</sup>Ibid., p. 386.



World countries frequently refers to the Tanzanian case of self-reliance projects. She mentions, for example, that the task of explaining the rationale of the programs is rendered easier in Tanzania because of the explicit philosophy of Education for self-reliance.<sup>45</sup> She also points out how Tanzanian policy-makers have gradually realized the magnitude of the problem of implementing such a radical policy, forcing them to revise the strategy of implementation by slowing down and trying to give more substantial support to decentralized implementation.<sup>46</sup> Sinclair's comments on the Tanzanian experiment are valuable for two reasons. First, she has a comparative view of what is happening in Tanzania vis-a-vis other parts of the world engaged in similar experiments. Secondly, her illuminative and "interactive" research approach is quite attractive.<sup>47</sup> In spite

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<sup>45</sup>Margaret E. Sinclair with Kevin Lillis, School and Community in the Third World (London: Croom Helm, 1980), p. 122.

<sup>46</sup>Ibid., p. 105. In Margaret Sinclair, "Introducing work experience programmes in Third World Schools," Prospects 7 (1977: 371).

<sup>47</sup>Interactive Research Approach: the writer draws the attention of the reader to the contrast between two research approaches, namely, (1) the subjective or interpretative-interactive and (2) the objective or rationalist-technicist. With the former, a researcher seeks to interpret and learn from the practice of the policies. There is a continued interaction or dialogue between the researcher and the facts in search of meaning. With the latter, a researcher, operating on the "hard system" metaphor, seeks to measure the success or failure of policy practice on the basis of objective clearly defined outcomes. This approach emphasizes the achievement of real goals.

Reference: Personal notes from a discussion of Don Adams (University of Pittsburgh), "Social Paradigms and Education Planning Models," presented at Comparative and International Education Society Meeting, Washington D.C., 12-15 March 1987.

of the problems observed, she remains optimistic about the possibility of finding ways to implement the noble idea of integrating work and education. She does not subscribe to the idea of abandoning the whole idea because of failures in the praxis. One caveat in regard to her work is that she is attempting a formidable task of comparing programs in countries with different social, political and cultural contexts. The understanding and application of her suggestions must take that fact into consideration.

Last, but not least, are the more recent views on the topic under discussion by Brian Cooksey and Donna O. Kerner. Cooksey has made a critical review of policies and practices in Tanzanian secondary education from 1967 to 1986. Commenting on school reforms in Tanzania, he suggests that ". . . generally they have been unsuccessful in achieving their stated goals and have had serious unforeseen and deleterious effects on the general standard of secondary education." In regard to self-reliance projects in particular, he remarks that the "production aspect is stressed over the didactic benefits." He further remarks that SR-activities are not integrated into the general curriculum but rather "tagged on as a non-examined afternoon chore which often serves to reinforce students' distaste of manual work." He concludes with this rhetorical question: "Are the political gains [however defined] from engaging students in unskilled manual labor really worth the opportunity costs in terms of formal instruction foregone? . . . What is needed in [Tanzanian]

secondary schools is more English not more maize."<sup>48</sup> Cooksey's critique is informative in many ways and the points he makes ought to be given serious thought. It is, however, based on documentary analysis rather than on direct field study. Moreover, like Foster, he seems to be influenced by a rationalist-objectivist modernization perspective in his evaluation. His overall assessment of Tanzanian efforts is negative. The writer submits that Cooksey's perspective of success and failure need to be re-examined and broadened for a fairer critique of the experiment.

Kerner conducted a field study in two regions, namely, Tabora and Kilimanjaro. She used questionnaires, interviews, participant observation and archival sources to look at "Education, Production and Differentiation" in Secondary Schools. She makes four important comments on productive activities in schools. First, in regard to integration of school and community, she noted that very few self-reliance projects involved directly the surrounding communities. Secondly, the emphasis on the economic success of projects often outweighed their usefulness as teaching devices. Thirdly, the teachers are still committed to the academic curriculum because they are generally and popularly evaluated by how their students perform in the national examination. Thus the teachers' chief concern was to cover the syllabus adequately and their involvement in SR projects was only

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<sup>48</sup>Brian Cooksey, "Policy and Practice in Tanzanian Secondary Education since 1967," International Journal of Educational Development 6 (1986): 184, 191, 192.

peripheral. Fourthly, she observed that merging theory and practice was difficult because of the critical lack of materials. To illustrate this point she quoted one agricultural teacher.

We can teach our students that they are supposed to test for the acidity of the soil, and then apply such and such a fertilizer, but when they go to the shamba, there is no equipment for testing, no fertilizer to apply. We preach modern agriculture but the truth is that the students are farming the way they always have at home.<sup>49</sup>

Methodologically, Kerner's findings are quite illuminative because they are based on a cross section of concrete reality of the schools she investigated first hand. However, one problem that faces the findings from this type of study is that of generalizability. In spite of that, her findings are a valuable asset for comparison with similar studies of schools in other parts of the country. It is only by replicating such studies and comparing the results that a better picture of the schooling reality in Tanzania can start to emerge.

In summary, a survey was made of the relevant literature in order to discover the different theoretical approaches regarding the role of manual work in education, and the empirical findings concerning the Tanzanian experiment of including manual work in education. It was shown that manual work activities in Tanzanian schools are based on the philosophy of Education for Self-reliance which is of a populist persuasion. It was also argued

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<sup>49</sup> Donna O. Kerner, "Education, production and social differentiation: a comparative study of two Tanzanian regions," Research Report presented to Staff/Student Seminar, (University of Dar es salaam: Department of Education, 26 July 1984), pp. 17-21. (Mimeographed.)

that, although populist policies are good for mobilizing people, they often run the danger of underestimating the problems of implementing massive innovations. Accordingly, it was suggested that an approach which combines the good qualities of both populism and pragmatism would be more desirable. By this approach there would be a continual dynamic interaction between theory and praxis based on scientific research. As to the evaluation of the implementation of the policy, the literature cited in this chapter does show that the studies already done on the topic are far from being conclusive. Most of them are either too ideologically influenced or, methodologically, too quantitative and "quick-result" oriented. The review, however, ended on a positive note concerning Kerner's approach of focusing on a small cross section of the school reality and trying to learn as much as possible from the concrete situation by carefully using a mixed methodology of both quantitative and qualitative approaches. Whereas quantitative methods are good for looking at quantifiable objective outcomes, such as economic aspects of educational innovations, the qualitative method is more appropriate for the less tangible and subjective outcomes, such as the humanistic values of cooperation and self-confidence fostered by a particular educational reform. The researcher has attempted to use this "mixed research methodology" on a small scale case study of six secondary schools. The following chapter will elaborate further on the design and execution of such a research strategy.

## CHAPTER IV

### METHODOLOGY

Two questions seem crucial in a chapter on methodology. First, what are the theoretical underpinnings of a particular chosen methodology? Secondly, what are the strategies in terms of design and procedures used in the study? What follows is an attempt to respond to these questions.

#### A Theoretical Framework

Four theoretical considerations influenced the methodology of this study. Choices of perspectives had to be made regarding the nature of educational research, the world view and the role of education in society, and strategies of implementing educational reforms. The following is a brief explanation of each consideration and its implications for the study.

Epistemological Paradigm. Since research is motivated by a quest for plausible explanation of phenomena, it is imperative for a researcher to be clear about what he or she understands by "truth" in social research. In social science research, there are two contending positions of looking at reality. One position is represented by the Durkheim-Hempelien point of view, the other one by the Dilthey-Weberian point of view. Emile Durkheim (1864-1920), as cited by John K. Smith, was a positivist who advocated the unity of science both physical and human or social. He argued

that, in social sciences, social facts should be seen as things and be treated in the same way as physical things are treated in physical sciences. According to him and followers of this school, the aim of the social sciences, just as in the physical sciences, is to discover general social laws, which would state the necessary and invariant relationships between and among social objects.<sup>1</sup> Hempel, like Durkheim, strongly advocated the use of general laws (D-N or Deductive-Nomological Model) in the study of social sciences. He stated that both in the natural and social sciences, the function of general laws is to connect events in patterns which are usually, then used as explanations or predictions.<sup>2</sup> Accordingly, this view holds that by the strict application of general laws to social facts, it is possible to arrive with certainty at objective truth. The underlying assumption is that there exists an objectively knowable factual social world. Those who seek truth in social sciences following this model are said to hold a "correspondence theory of truth," which consists in the agreement of social facts with general laws. In regard to methodology, this perspective of truth is the one which dominates the quantitative research paradigm--briefly described as positivistic, hypothetico-deductive, particular-

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<sup>1</sup>John K. Smith, "Quantitative Versus Qualitative Research," Educational Researcher, March 1983, p. 7. For further reading see Emile Durkheim, The Rules of Sociological Method, Eighth Edition, Translated by Sarah A. Solovay and John H. Mueller and edited by George E.G. Catlin (New York: The Free Press, 1964), pp. 125-146.

<sup>2</sup>Carl G. Hempel, Aspects of Scientific Explanation, (New York: The Free Press, 1970), pp. 231-243.

istic, objective, outcome-oriented and dominated by natural science world view.<sup>3</sup>

The above position was attacked by Wilhelm Dilthey (1833-1911) and Max Weber (1864-1920). Dilthey, as quoted by Smith, emphasized the difference between human sciences and natural sciences. He based his argument on the fact that whereas the physical sciences dealt with inanimate objects that could be seen as existing outside us, the social sciences were concerned with the "product of human minds and was therefore inseparably connected with our minds with all the attendant subjectivity, emotions and values."<sup>4</sup> He also argued that experiential foundations of human studies were different from those of natural sciences: natural sciences begin with sense data and thus cannot find any principle of unity in them; the unity of the physical world has to be supplied by hypothesis. But the human studies can rest upon a direct apprehension of their object as a living unity; the inquirer finds it given in himself by inner perception, and discovers it from moment to moment in his understanding of others. Dilthey referred to this particular way of understanding human behavior in social sciences as "Verstehen" (Understanding). He depicted Verstehen as a process of reconstructing in our minds, starting from observed expressions

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<sup>3</sup>Charles S. Reichhardt and Thomas D. Cook, "Qualitative and Quantitative Methods in Evaluation Research," in Susan E. Salasin and Robert Perloff, Eds., The Sage Research: Progress Series in Evaluation, Vol. 1, 1979, p. 11.

<sup>4</sup>John K. Smith, "Quantitative Versus Qualitative Research," p. 7.



of lived experiences, a replica of another person's processes.<sup>5</sup>

Max Weber too, as explained by Guy Oakes, drew a sharp distinction between physical sciences and socio-cultural sciences. He stated that, in contrast with physical sciences, social sciences are concerned with "meaningful human conduct." He advanced the concept of "predefinition" of social phenomena, by which he meant that human action and its artifacts, the subject matter of socio-cultural investigation, are already defined by the actors themselves. Before the social scientist begins the investigation of some item, it is already predefined as a cultural phenomenon by the "native." Thus the task of a socio-cultural researcher is to identify this socio-cultural phenomenon by reference to its meaning as this meaning is defined or understood by the natives themselves. Weber advocated that investigation in social research should aim at "meaning" ("Bedeutung" or "Sinn"), "understanding" ("Verstehen") and "interpretation" ("Deutung") rather than at causal explanation of socio-cultural phenomena.<sup>6</sup>

According to the above Dilthey-Weberian position, social research does not pretend to establish "objective" truth but

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<sup>5</sup>H.A. Hodges, The Philosophy of Dilthey (Routledge & Kegan Paul Ltd., 1952), passim. For further reading see Wilhelm Dilthey, Pattern and Meaning in History: Thoughts on History and Society edited and introduced by H.P. Rickman (New York: Harper and Brothers, 1962), p. 17-18 and id., Descriptive Psychology and Historical Understanding translated by Richard M. Zaner and Kenneth L. Heighes (The Hague: Martinus Nijhoff, 1977), pp. 78-81, 117-18, 125-33, 137-38.

<sup>6</sup>Guy Oakes, "The Verstehen Thesis and Foundations of Max Weber's Methodology," History and Theory 16 (1977): 21-27.

seeks to deepen the understanding of the infinite array of social realities whose truth is historically and community bound. This perspective can generally be defined as the "coherence theory of truth."<sup>7</sup> The Verstehen Thesis and the Coherence Theory of Truth underlie the qualitative methods of research, which Reichhardt and Cook have described as phenomenological, inductive, holistic, subjective, process-oriented and dominated by a social anthropological world view.<sup>8</sup>

Both paradigms of research, quantitative and qualitative, have their strengths and weaknesses. For example, while quantitative methods are good at verification, qualitative methods are excellent at interpretative understanding of human interaction. Whereas quantitative research runs the danger of a Type I Error, that is, rejecting a true hypothesis due to inadequate sampling and errors of measurement, qualitative research can easily be affected by a Type II Error, that is, accepting a false hypothesis due to over-generalization.<sup>9</sup> The debate continues among researchers as to which paradigm is better suited for education. However, since the 1970s, there has been a rising interest in the qualitative research approach in education

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<sup>7</sup>John M. Johnson, Doing Field Research (Beverly Hills, CA: Sage, 1975), p. 185.

<sup>8</sup>Reichhardt and Cook, "Qualitative and Quantitative Methods," p. 11.

<sup>9</sup>The analogy between a Type II error and qualitative research methods should be viewed as a conceptual one since, strictly speaking, the determination of either type of error in quantitative research methods depends on probability sampling assumptions and operationalization of variables.

because the quantitative paradigm, has not been appropriate for many problems and issues.<sup>10</sup> Patton, quoting Cronbach, explains why researchers in education are turning more and more to qualitative methods.

Social phenomena are too variable, and too context bound to lend themselves to generalizations. He [Cronbach] places particular emphasis on the importance of interpreting data in context rather than reducing the context to arrive at generalizations. Local conditions become primary. In interpreting local conditions and patterns he emphasizes providing information and developing concepts that will help people use their heads instead of constructing generalizations and building theory.<sup>11</sup>

The writer, however, in this study chose to follow the advice of Reichardt and Cook who argued that "rather than being incompatible rivals, the methods [quantitative and qualitative] can be used together as the research question demands."<sup>12</sup> Thus, while committed to the "verstehen" perspective, the researcher used a mix of quantitative and qualitative research procedures for a better understanding of the problem. The quantified findings from the questionnaire were critically compared with

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<sup>10</sup>Robert C. Bogdan and Sari Knopp Biklen, Qualitative Research for Education: An Introduction to Theory and Methods (Boston: Allyn and Bacon, Inc., 1982), pp. 21-30.

<sup>11</sup>Michael Quinn Patton, Qualitative Evaluation Methods (Beverly Hills, CA: Sage Publications, 1980), p. 280.

<sup>12</sup>Reichhardt and Cook, "Qualitative and Quantitative Methods," p. 20. For further discussion concerning the appropriateness and inappropriateness of mixing up qualitative and quantitative methods, see John K. Smith, "Closing Down the Conversation: The End of the Quantitative-Qualitative Debate Among Educational Inquirers" Educational Researcher, 15(1986): 4-12, and Ray C. Rist, "On The Relations Among Educational Research Paradigms: From Disdain to Detente" Antropology and Educational Quarterly 8(1977): 42-49.

qualitative findings from both the interviews and participant observation, thus, hopefully, providing by way of triangulation a fuller meaning of the phenomenon under study.

Worldview of Society (Weltanschauung) and the Role of Education. One can look at society either from structural-functional or conflictual points of view.<sup>13</sup> In "Structural functionalism," society is seen as a system composed of interrelated institutions (religion, education, politics, family etc.). These institutions are seen as parts of a whole and are constantly seeking equilibrium or harmony among them. The interrelationship of these parts occurs by consensus. Pathological or non-normative events produce tension among the parts, causing them to strive and adjust in order to restore equilibrium (homeostasis) again. Structural functionalists regard conflict in society as dysfunctional to social integration and equilibrium. This perspective advocated by Talcott Parsons and Robert K. Merton dominated social science theory and research from the 1940s to the 1970s. One of the main criticisms against this view is that it has an ideological bias in favor of the status quo. It focuses on the static aspects of society to the neglect of change, process, conflict and dissent. Harmony and integration are seen as functional, whereas conflict, change or tension are seen as dysfunctional and to be avoided. Thus, in the 1960s, structural functionalism was fused with neo-evolutionism

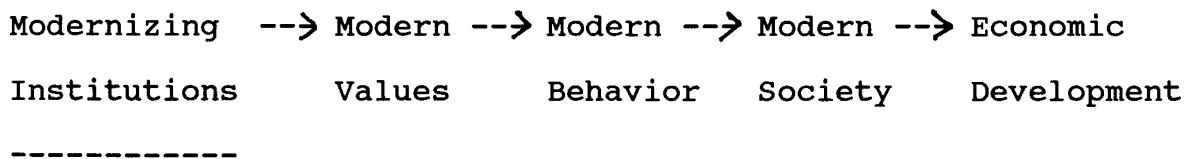
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<sup>13</sup>Ingemar Fagerlind and Lawrence J. Saha, Education and National Development: A Comparative Perspective (New York: Pergamon Press, 1983), pp. 14-19.

by Talcott Parsons in order to explain change.<sup>14</sup> He argued that societies change along an evolutionary path through the processes of integration, differentiation and reintegration, taking into account both internal and external factors. This theory gave birth to the much publicized "Modernization Theory." According to Inkeles and Smith, Modernization Theory is based on the notion that there is a direct causal link between five sets of variables, namely, modernizing institutions, modern values, modern behavior, modern society and economic development.<sup>15</sup> These links as illustrated by Fagerlind and Saha are shown in the following figure (see Figure 11).

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Fig. 11. The Process of Modernization



Source: Fagerlind and Saha, Education and National Development, p. 16.

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Even this improved form of structural functionalism, however, has been greatly criticized on four grounds. Firstly, the causal

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<sup>14</sup>Talcott Parsons, Societies: Evolutionary and Comparative Perspectives (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1966).

<sup>15</sup>Alex Inkeles and David H. Smith, Becoming Modern, (London: Heinman Education Books, 1974).

links between the proposed variables have not been empirically proved. Secondly, the theory wrongly assumes the incompatibility between so-called modern and traditional values. Thirdly, one may be misled by this theory to think that modern values and behaviors by individuals, which may be to a certain extent a necessary condition, are also a sufficient condition for socio-economic development. Last, but not least, in the theory of modernization is embedded crude ethnocentrism, whereby the criteria to measure modernization are based on the level of westernization. In other words, to become modern means to become western.<sup>16</sup> One need not belabor the point that structural functionalism in all its modified forms is no longer popular, especially among nonwestern and third world scholars.

The main theories that emphasize the conflictual view of society include Marxist-Leninist, Dependency, and Liberation Theories. First, Marxist-Leninism emphasizes the role of class-conflict in society. Society is polarized between the classes of the exploiters and the exploited. Though class-conflict can be a useful tool in analyzing society, it is the rigidity and the perpetual polarization of human relationships which makes "scientific" Marxist-Leninism unpalatable to those suspicious of ideological dependency. Secondly, "dependency" theorists, such as Andre Gunder Frank, Johann Galtung and F.H.Cardoso, see the world as dominated by an exploitative capitalist relationship between

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<sup>16</sup>Ankie M.M. Hoogvelt, The Sociology of Developing Societies, (London: Macmillan Press, 1976).

the "center" and "periphery" countries or the metropolises and the satellites.<sup>17</sup> They argued that this relationship is dynamic and dialectical, that is, the center develops at the expense of the periphery. In addition, Frank has said that the "elites" or the "lumpen bourgeoisie" in the poor countries were the major instruments of this dependency relationship.<sup>18</sup> The main criticism usually advanced against dependency theory is that it focuses too much on the external causes of underdevelopment, to the neglect of the internal structures that may contribute to the undesirable situation. Moreover, while advocating complete disassociation with the center, this theory does not offer viable alternatives for development in the poor countries. Thirdly, the "liberationists" see the poor in underdeveloped societies as oppressed by those in power in their own societies, who control the relevant economic resources such as land, industry and wealth. They see the hope of the poor to lie in the radical change both in the social structures of these societies and in the current socio-economic, political and cultural world order. The well-known proponents of this theory are Paulo Freire and

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<sup>17</sup>Johann Galtung, "A Structural Theory of Imperialism," Journal of Peace Research, 8(2), 1977, pp.81-117. See also Andre Gunder Frank, Capitalism and Underdevelopment in Latin America (New York: Monthly Review Press, 1967) and F.H. Cardoso, "Dependency and Development in Latin America," New Left Review, 74 July-August 1972, pp. 83-95.

<sup>18</sup>Andre Gunder Frank, Lumpenbourgeoisie and Lumpendevelopment (New York: Monthly Review Press, 1972).

Adam Curle.<sup>19</sup> They argue that the only solution to this situation is to educate the oppressed to be aware of their condition, so that they can engage actively in a protracted struggle against oppression. Freire called this process "conscientizacao" ("conscientization"), which he explained as follows:

As the cultural revolution deepens 'conscientizacao' in the creative praxis of the new society, men will begin to perceive why mythical remnants of the old society survive in the new. . . .I [Freire] interpret the revolutionary process as dialogical cultural action which is prolonged in 'cultural revolution' once power is taken. In both stages a serious and profound effort at 'conscientizacao' -- by means of which men, through a true praxis, leave behind the status of 'objects' to assume the status of historical 'subjects' is necessary.<sup>20</sup>

Liberation Theory is often criticized for its utopianism in holding that education for liberation is the only hope to eliminate injustice in the world. It is argued that the conscientization approach can be used to serve any political position.<sup>21</sup>

The above theories of looking at society exercise great influence on how one sees the role of education in society. In the 1960s, when Structural-Functionalism was a dominant theory, there was great optimism that education could play a decisive role in economic development. Theodore Schultz, an advocate of

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<sup>19</sup>See Paulo Freire, Pedagogy of the Oppressed (New York: Herder and Herder, 1972) and Adam Curle, Education for Liberation (New York: John Wiley, 1973).

<sup>20</sup>Freire, Pedagogy of the Oppressed, p. 158.

<sup>21</sup>Roland Paulston, "Social and Educational Change: Conceptual Framework," Comparative Education Review, 21 (June-October 1977), pp. 370-395.



Human Capital Theory which is a variant of Structural Functionalism, argued that "education does not only improve the individual choices available to men, but that an educated population provides the type of labor force necessary for industrial development and economic growth."<sup>22</sup> Following this theory, many governments in developed and developing countries invested large sums of money in education in the hope that it would promote development. This optimism in regard to education was criticized in the 1970s, due to both the lack of tangible positive results from the expansion of education and the rise of Dependency Theory which argued that education, as long as the dependency relationship persisted, was just an ideological apparatus operating in the interests of the centers or metropolises. As a result, the 1970s were years when pessimism regarding the role of education was dominant.

The 1980s seem to be characterized by a resurgence of moderate optimism. While avoiding the blind faith in education suggested in the Human Capital Theory and the exaggerated confidence in "critical education" advocated by Liberation Theorists, it is maintained that education with the right orientation can play a very important, though not decisive, role in development. As for the right orientation, Fagerlind and Saha suggest that "it is important to determine what kind of development is desired, what kind of education is more suitable

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<sup>22</sup>Theodore W. Schultz, "Investment in Human Capital," American Economic Review, 51 March 1961, pp. 1-17. In Fagerlind and Saha, Education and National Development, p. 18.

for this development and whose interests in the development process should prevail."<sup>23</sup> The same new optimism in education was expressed by Gail P. Kelly saying that though education cannot change everything, it can in the long run change a lot provided it is properly planned.<sup>24</sup> Philip H. Coombs states that this new optimism has "grassroots" support: "the most important reality of all is that people the world over, in defiance of the crisis of confidence in education that has gained currency in some circles, have great faith in education. They want more and more of it and they will not be denied."<sup>25</sup>

In view of the above discussion, the writer's approach in this study was that of a conflictual view of society but influenced by the "Zeitgeist" of the new optimism in regard to the role of education in society. He avoided the paralyzing effect of a view that promotes incompatibility between the Marxist, Dependency and Liberation Theories. These three perspectives were useful in asking questions relevant to the study. For example: Was the new policy promoting class differences in society? How were the attitudes towards manual work in schools influenced and related to the international

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<sup>23</sup>Fagerlind and Saha, Education and National Development, p. 58.

<sup>24</sup>Gail P. Kelly, "Comparative Education and the Problem of Change: An Agenda for the 1980s, CIES Presidential Address, presented at the CIES 31st. Annual Meeting, March 12-15, 1987, Washington D.C.

<sup>25</sup>Philip H. Coombs, The World Crisis in Education: The View from the Eighties (New York: Oxford University Press, 1985), p. 135.

division of labor? How much "conscientization" was being carried on in the implementation of the policy? In short, the writer was persuaded that a mix of the various Conflict Theory perspectives could lead to a better analysis of the schooling reality in Tanzania, which is still affected in subtle ways by neo-colonialism.

Reform Strategies. The last, but not least, consideration affecting the research approach was the question as to which strategy was used in the implementation of including manual work in Tanzanian secondary schools. Chin and Benne provide a useful parallelism between different typologies of strategies used in implementing educational reforms. The figure below illustrates this parallelism.

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Fig. 12. Strategies in Implementing Educational Reforms

CHIN	JONES (from Etzioni)	MILES	WALTON
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1. Power-Coercive	Coercive	Power-Solution	Power
2. Normative Re-educative	Normative	Relationship-Attitude	Love-Trust
3. Rational-Empirical	Utilitarian	Problems-Process	Problem-Solving
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Source: M.E. Sinclair with Kevin Lillis, School and Community in the Third World (London: Croom Helm Ltd., 1980), p. 112.

In order to give an idea of the implications of the above strategies, a brief explanation of Chin's typology, which mutatis mutandis applies to the other typologies, is provided below.<sup>26</sup>

The first group of strategies is the Power-Coercive or Political Administrative Approach. Characteristic of this approach is the compliance of those with less power with the plans, directions and leadership of those with greater power. These strategies involve getting the authority of law or administrative policy behind the changes to be effected. Coercive power strategies rely on either political, economic or moral power. Political power carries legitimacy and sanctions for those who break the law. Once a law has been passed regarding a certain reform, then all subjects must obey that law or face sanctions. Economic power exerts coercive influence on the institutions and individuals economically dependent on those ordering the reforms. For example, schools totally financed by government have to comply with the orders of reform from the government. Moral power, on the other hand, plays upon the sentiments of guilt and shame. The reforms are mandated in such a way that those who do not comply feel haunted by a sense of betrayal and disloyalty to the common good. In education, power-coercive strategy may be of two variations, namely, a mandatory

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<sup>26</sup>Robert Chin and Kenneth D. Benne, "General Strategies for Effecting Changes in Human Systems," in Warren G. Bennis, Kenneth D. Benne, Robert Chin and Kenneth E. Corey, Eds., The Planning of Change (New York, Chicago, London: Holt, Rinehart and Winston, 1976, Third Edition), pp. 22-45.

adoption of relevant educational reforms either by a limited number of a new set of institutions or by all members of a well-established system, within a specified short period.

The second group of strategies is that of a normative re-educative approach. These strategies are based on the assumption that human motivation is crucial in the implementation of policies. It is held by the proponents of this approach that change will occur and policies will be effective only as the subjects involved are brought to change their normative orientations to old patterns and develop commitments to new ones. And this change of normative orientations imply changes in attitudes, values, skills, and significant relationships, not just changes in knowledge, information or intellectual rationales for action and practice. Proponents of this approach recognize the importance of non-cognitive determinants of behavior as resistances or supports to changing--values, attitudes and feelings at the personal level and norms and relationships at the social level. They advocate, therefore, various forms of "sensitivity training" designed to involve and motivate persons to bring about the desired change. For example, in education, this approach may mean the development of innovative centers for preparing the teachers and the involvement of serving teachers in the process of course or relevant program development.

Finally, the third group of strategies is that of a rational-empirical nature. This approach is based on two

assumptions, namely, that human beings are rational and that they will follow their rational interest if this is revealed to them. It is assumed that by showing the intrinsic merits of the policy or innovation, implementation is thereby rendered easy. In this approach, knowledge seems to be the major ingredient of power. Those who know are considered to be legitimate sources of power and to have the right to influence those who do not know through processes of education and dissemination of valid information. Exponents of this view emphasize the role of scientific investigation and research in the implementation of educational policies.<sup>27</sup>

From the above exposition, it seems obvious that the researcher was interested in identifying what strategy or strategies were used in the implementation of the policy under study and what were their pluses and minuses. Based on the literature review and his own teaching experience in Tanzanian schools, the writer began the field research with a working hypothesis that the strategy used to implement ESR and in particular the inclusion of manual work in schools was the power-coercive or political-administrative strategy. In 1967, the immediate inclusion of "self-reliance activities" in all Tanzanian schools was mandated by the ruling party.<sup>28</sup> In the discussion of the findings it will be shown how this strategy

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<sup>27</sup>For more information about these strategies see also M.E. Sinclair with Kevin Lillis, School and Community in the Third World (London: Croom Helm Ltd., 1980), pp.99-113.

<sup>28</sup>Ibid., p. 104.

worked out and what modifications were adopted in the process.

Having pointed out the major theoretical underpinnings that influenced the research methodology, the writer now moves on to the second part of this chapter, namely, describing the design and procedures of the research.

### The Design and Procedures of the Research

This study was basically influenced by the "verstehen" perspective. The researcher was convinced that a holistic and naturalistic inquiry, as contrasted with a hypothetico-deductive inquiry, was more suitable for the problem under study. However, following Patton's insight, the writer finally decided to adopt a mixed strategy of utilizing both qualitative and quantitative measurements for the investigation of the problem.<sup>29</sup> The rationale behind such a strategy is cogently expressed by Denzin:

No single method ever adequately solves the problem of rival causal factors. . . . Because each method reveals different aspects of empirical reality, multiple methods of observation must be employed. This is termed triangulation. I now offer as a final methodological rule the principle that various methods should be used in every investigation.<sup>30</sup>

Thus, the general design of this investigation had four parts, namely, documentary search, interviews, case-cluster study of six secondary schools, and analysis of the collected data. The following is a brief description of how the researcher proceeded

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<sup>29</sup>Michael Quinn Patton, Qualitative Evaluation Methods (Beverly Hills, CA: Sage Publications, 1980) pp. 108-117.

<sup>30</sup>Ibid., p. 109.

in the implementation of the research design.

Documentary Search. Throughout the study, one of the main concerns of the researcher was to discover and consult what has already been written about the topic, especially the most recent literature. In order to achieve this goal two Eric and Dissertation Abstracts searches were done, one on 4 September 1985, and the other on 5 January 1987. Loyola University Library, the Inter-Library Loan System and the Africana Section of Northwestern University Library were very helpful for most of the relevant literature available in Europe and the United States on the topic. The University of Dar es salaam enriched his search with materials uniquely available in Tanzania. Both before and after the field study, the writer spent considerable time perusing books, documents and dissertations relevant to the study. Other sources of documents included, the Institute of National Education, Ministry of National Education, School Records and personal collections of lecturers in the Department of Education at the University of Dar es salaam. Unfortunately, the researcher missed the opportunity of spending substantial time in the Tanzania National Archive due to a sudden malaria attack after the preliminary visit. Since time was not available for reading in situ all the literature, the researcher had to xerox or microfilm most of the literature for later consultation. All in all, the documentary search played a vital role throughout the study by providing new insights and directions to the research.



Interviews. The rationale behind the use of interviewing is that it enables a researcher, by careful questioning and listening, to enter another person's experience directly rather than indirectly through the written word.<sup>31</sup> The writer made use of this valuable instrument. Outside the case-cluster study, a total of twenty-nine interviews were conducted and distributed as follows. Four lecturers at the University of Dar es salaam, three scholars at the Institute of Education, the Director of National Examinations Council, six officials in the Ministry of Education and six parents were interviewed. In addition, four community leaders, including the Party Chairman, the Regional Education Officer, the Director of the Institute of Adult Education (all three of Kagera Region) and Bishop C. Mwoleka, who has shown keen interest in work-oriented education by starting a private school in that line, were interviewed. Also interviewed were three groups of former students of Kibaha, Kilosa and Ruvu secondary schools which count among the success stories of the integration of education and manual labor. Finally, the researcher had the opportunity to visit and interview the principals of two of the three above mentioned schools, namely, Ruvu and Kibaha.

In the actual interviewing a flexible interview guide approach was used.<sup>32</sup> Due to the constraints of time, both the informal conversational and the standardized open-ended interview

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<sup>31</sup>Ibid., p. 196.

<sup>32</sup>Ibid., p. 197.

approaches were not used. A copy of the interview guide that was used is given in appendix E. However, in the actual interviewing, in order to avoid the disruption of the flow of the conversation, the specifications of the interview guide were not strictly followed. Only a special effort was made to focus the conversations to the major concerns of the research, namely, the interviewee's views regarding the goals of the policy, its success or failure, factors influencing the implementation and its impact on the quality of education in general. Notes were taken as the interviews continued and with permission on some occasions a taperecorder was used. The major problem one had to contend with was setting up and honoring appointments, as many of the interviewees had much on their minds due to the hard economic conditions in the country at that time. Notwithstanding that, this part of the research was quite refreshing and informative.

The Case-cluster Study. This was planned to be the core of the research project. An in-depth study was to be conducted in six secondary schools in the Kagera Region. One may ask: why only one region out of twenty-five, and six schools out of a total of 179 (as of 1985) government and private secondary schools? In the first place, since conducting a holistic ethnographic study demanded a good understanding of the region, the people and their culture, and since the time available for the research was limited, the logical thing to do was to choose schools in a region with which the researcher was most familiar and where he had ten years of teaching experience. Secondly, since it was

virtually impossible to conduct an intensive study of all schools, one had to settle with a representative sample, given the constraints of time and research resources under which the researcher was operating. The six schools were chosen because they were ordinary schools, i.e. neither extraordinarily good or bad performers, and represented various aspects that could impinge on the implementation of the policy. These aspects included: rural and urban, girls, boys'and coeducational, boarding and day, public and private, ordinary level and advanced level. It was hoped that by comparing and contrasting the policy implementation in these schools under the above mentioned various aspects one could arrive at a richer understanding of the situation. Before describing the details of the study, a brief presentation of the schools that were studied is provided below.

Bukoba Secondary School. Situated in the middle of Bukoba Town, half a mile away from the shore of Lake Victoria, Bukoba is a public, urban, coeducational, ordinary level and significantly day school with a commercial bias. It was started in 1939 as Grewal Indian Public School, was nationalized and renamed as Bukoba on 1 July 1970. In 1986, the 380 student body was composed of 148 girls and 232 boys, of these 203 were boarders and 177 day students. The school staff included twenty three teaching and eighteen non-teaching members. Among the major obstacles to better educational achievements, mention was made of transportation problems for day scholars, unpredictability of electric supply, proximity to town with all its allurements to

students, and a critical shortage of school materials, such as stationery, audio-visual aids, chemicals etc. In spite of this, based on 1985 National Examinations Comparative Results, the school's academic performance was quite satisfactory. Out of 179 schools, it was ranked thirty first.<sup>33</sup> On the production side, the school was handicapped by its location and the political-economic situation. As far as agricultural projects were concerned, the school being situated in the center of the town had a land problem: only half an hectare was available for gardening.<sup>34</sup>

As for other projects, such as dairy farming, handicrafts, school shop and refreshment services, they were affected by the shortage of crucial supplies. The school did not have the political clout to procure the scarce items from the local suppliers. In 1983, Bukoba was ranked seventy-first out of eighty-five government secondary schools.<sup>35</sup> In 1985, the yield from productive labor was as follows (see Table 5).

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<sup>33</sup>See appendix J - Comparative Academic Performance by Form Four Secondary Schools--1985.

<sup>34</sup>Hectare is a unit of area in the metric system equivalent to 2.471 acres.

<sup>35</sup>See appendix I - Report on Productive Activities in Government Secondary Schools in Order of Performance--1983.

TABLE 5

## SELF-RELIANCE PROJECTS, 1985 - BUKOBA SECONDARY SCHOOL

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Name of Project	Size of Project	Value of Total Production	Cost of Production	Net Profit
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School shop	15,925.45	5,050.15	1,157.00	3,893.15
Embroidery	---	1,995.00	1,015.00	980.00
Dairy Cows	2	7,812.50	1,635.00	6,177.50
Vegetable Garden	1/2 hectare	21,029.50	989.00	20,040.50
Canteen	---	7,584.50	3,293.10	4,291.40
Fishing	1 engine + nets	2,600.00	---	2,600.00
<hr/>				
TOTAL		46,068.65	8,086.10	37,976.55
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Source: School Records of Bukoba Secondary School.

Note: The Currency referred to in the study, unless otherwise stated, is Tanzanian Shilling. Exchange rate in Tanzanian shillings per one United States dollar was in: 1983=11.143; 1984=15.292 and 1985=17.472. Source: UNESCO, Statistical Year Book (Printed in Belgium, 1986), pp. A-12 & 13.

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In view of the 1975 government directive that schools should be self-reliant 25 percent, as far as catering expenses are concerned, Bukoba Secondary School in 1985 achieved only 3.13 percent of it. Similarly, in regard to the 1980 directive that each student should produce a net profit of 180.00 shillings per year, production in this school was 99.94 shillings per student,

which was 55.52 percent of the set target.<sup>36</sup>

Kahororo Secondary School, a boarding, public, boys', ordinary level and rural school with a technical bias, situated about five miles away from Bukoba Town along the shore of Lake Victoria, was started in 1954 by Lutheran Missionaries and was taken over by the government in 1970. The student population in 1986 was 320--all boys. The staff was composed of nineteen teaching and eighteen non-teaching members. The striking anomaly about the school was that though it was labeled as having a technical bias, nothing had been done to implement this idea. The writer consulted the authorities in the Ministry of Education about this and was informed that the case of Kahororo S. School was being reviewed. The school's academic performance as shown by the National Comparative Results for 1985 was above average: out of 179 schools, it was ranked as forty-eighth. On the side of production, efforts of this school were affected by the condition of the soil which was sandy and water-logged. In spite of this, in the year 1983, Kahororo ranked sixty-ninth out of eighty-five government schools. Production efforts in the

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<sup>36</sup>It was directed by the Ministry of Education in 1975 that schools should aim at meeting 25 percent of the catering expenses. See circular, Uzalishaji Mali of 1 December 1975 (Dar es salaam: Ministry of Education, Self-Reliance File, Folio #62). It was further directed in 1980 that schools should dedicate 10 hours per week to productive activities. The target gross production that was set per student was, TShs.2.40 per hour, 24.00 per week, 96.00 per month and 864.00 per academic year(nine months); net-profit to be contributed by each student was set at 20.00 per month and 180.00 per academic year. See Circular No. EDF.1/100/7 (Dar es salaam: Ministry of Education, 24 March 1980).

schools for 1985 are summarized in Table 6. Calculation based on these figures shows profit for that year was 192.33 shillings per student, which was 106.85 percent of the national target of 180.00 shillings per student per annum. The contribution to the catering expenses was 3.44 percent as compared to the national target of 25 percent.

TABLE 6

## SELF-RELIANCE PROJECTS, 1895 - KAHORORO SEC. SCHOOL

Type of Project	Net-Profit in TS
Potatoes and Cassava . . . . .	975.00
Coffee Plantation . . . . .	3,885.80
Dairy Cows (2) . . . . .	12,506.50
Trees [Sales from...]. . . . .	2,950.00
Vegetable Garden [Cabbage & Tomatoes] . .	29,320.00
Banana plantation [1 1/2 acres]. . . . .	2,267.00
School shop. . . . .	9,921.85
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TOTAL. . . . .	61,545.15

Source: School Records of Kahororo S. School.

Rugambwa Secondary School. Named after the first East African Cardinal, Laurian Rugambwa, the school was started in 1965 by Maryknoll Missionary Sisters under the auspices of Bukoba Catholic Diocese. Like other schools it was nationalized in 1970. It is situated on a hill overlooking Lake Victoria and Bukoba Town, four miles away. It is a public, boarding, A-level and girls' school with a mixed bias of commerce and agriculture. In 1986, the school community consisted of 478 students, thirty-

two teachers and twenty-one supporting staff. Special problems affecting academic performance at this school were a chronic shortage of teachers and a significant lack of good materials for teaching. Students' hopes for a successful future were bleak. According to 1985 National Comparative Examinations Results, Rugambwa was ranked 115th out of 179 schools. On the side of self-reliance activities, the following were listed for 1985.

TABLE 7

## SELF-RELIANCE PROJECTS, 1985 - RUGAMBWA SECONDARY SCHOOL

Name of Project	Size of Project	Value of Total Production	Cost of Production	Net Profit
Banana Plantation	1 hectare	5,494.00	1,260.00	4,234.00
Dairy Cows	1	5,281.50	6,960.00	---
Vegetable Garden (cabbage)	0.4 hectare	7,340.00	1,900.00	6,440.00
Sewing & Needlework	---	9,400.00	2,408.00	6,992.00
Tea plantation	1 hectare	1,358.00	2,000.00	---
Canteen	---	20,894.60	13,925.00	7,269.60
Piggery	2	---	---	---
Trees	---	---	---	---
Cultural Performances	---	2,542.00	1,400.00	1,142.00
Maize plantation	---	2,160.00	---	---
<b>TOTAL</b>		<b>54,570.10</b>	<b>29,553.00</b>	<b>26,077.60</b>

Source: School Records of Rugambwa Secondary School.



In this school, production for 1985 was 54.56 shillings per student which was 30.31 percent of the national target of 180.00 shillings per student per annum. The contribution to the catering expenses was 1.09 percent as compared to the national target of 25 percent. In 1983, out of eighty-five government schools, Rugambwa was placed sixty-third as far as production was concerned.

Nyakato Secondary Schools. This is the oldest government-instituted secondary school. Many educated people of the colonial period went through this institution. It was started in 1920 and served as a military barracks during World War II. Situated in the rural area, it is surrounded by densely populated villages and owns a lot of fertile land around it. It is a boarding, boys' and O-level school with an agricultural bias. In 1986, the school community consisted of 415 students, twenty-six teachers and and fifteen auxilary staff members. Certainly the old physical plant, which is desperately in need of repair and the critical shortage of teaching materials, affect adversely the performance of the school. Notwithstanding that fact, for the year 1985 Nyakato stood thirty-first out of 179 schools according to the national comparative academic performance of Tanzanian schools. In the area of productive work, the school had to face the challenges of proper utilization of the good land at its disposal and the protection of crops from pilfering incursions from the neighboring villages. The self-reliance projects for the year 1985 were summarized as shown in

Table 8. Production per student that year was 75.35 shillings which was 41.86 percent of the national target of 180 shillings. In 1983, Nyakato Secondary School was fifty-second out of eighty-five government schools as far as production was concerned.

TABLE 8

## SELF-RELIANCE PROJECTS, 1985 - NYAKATO SECONDARY SCHOOL

Name of Project	Size of Project	Value of Total Production	Cost of Production	Net Profit
Banana plantation	4 acres	7,792.00	---	7,792.00
Tea plantation	4 acres	---	---	---
Coffee plantation	3 1/2 acres	2,365.90	230.00	2,135.90
Vegetable Garden*	---	10,576.00	7,746.65	2,829.35
Cattle (beef & dairy)	17	8,357.00	1,832.00	6,525.00
Piggery	4	1,520.00	---	1,520.00
Natural Resources (forest)	3 1/2 acres	3,280.00	---	3,280.00
School shop	---	127,844.00	124,634.10	3,209.90
Maize plantation	3 acres	4,617.00	640.00	3,977.00
TOTAL		166,351.90	136,082.75	31,269.15

\*This includes cabbages, tomatoes and spinach.

Source: School Records of Nyakato secondary school.

Omumwani Secondary School. This is a private secondary school started in 1966 owned and operated by TAPA (Tanzania Parents Association). It is situated about two miles outside Bukoba town but with a lot of influence from the town as the majority of day students reside there. The school is co-educational, O-level, both day and boarding with an agricultural bias. There is enough fertile land owned by the school for agricultural activities. Due to the special type of organization of this school, it was difficult for the writer to get all the required statistical information. In 1986, the school had 796 students and twenty-one teachers. In 1982, out of the student population of 632, 228 were girls and 404 were boys. Students in this school, and generally in all private schools with the exception of seminaries, are selected from the mass of students who do not qualify for selection into government secondary schools. Since access to secondary education is extremely competitive in Tanzania (promotion rates in 1983 and 1986 were 4.1 and 3.1 percent respectively), admission to the school depends more on the parents' political and socioeconomic influence rather than on the students' performance merits.<sup>37</sup>

The above mentioned factor, in conjunction with others, such as the critical shortage of teachers and equipment, explains the unsatisfactory academic performance of the school. In 1985,

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<sup>37</sup>For promotion rates, see Minister of Education Jackson M. Makweta, Budget Speech 1984-1985 (Dar es salaam: United Republic of Tanzania), p. 9; and Brian Cooksey, "Policy and Practice in Tanzanian Secondary Education since 1967," International Journal of Educational Development 6 (1986): 184.

out of 179 schools, it ranked 167th. As far as productive projects are concerned, in 1983 the school had the following projects: 1.50 hectares of banana plantation, one acre of coffee trees, mixed cropping of maize and beans, cattle farming (six beef and two dairy), piggery (five pigs), school shop, forestation project and school canteen. The net profit made in 1983 was 21,893.50 shillings, which was equal to 34.64 shillings per student, that is 20.35 percent of the national target, and 5.3 percent of the school's catering expenses as compared to the national target of 25 percent. The relative higher percentage of the contribution to the cost of food in comparison with other schools discussed above is due to the fact that most of the students here are day scholars and thus the expenditure on food is less.

Ihungo Secondary School. St. Thomas More College, as it was known then, was founded in the 1940s by the Apostolic Vicariate of Bukoba and was later staffed and run by the Canadian Missionary Brothers of Christian Instruction under the auspices of Bukoba Catholic Diocese. It was nationalized in 1969 and given its present name. It is a boys' boarding and A-level school with an agricultural bias. It is situated on the top of a hill about six miles from Bukoba Town. From the school, one enjoys a gorgeous view of the town and the beautiful waters of Lake Victoria. In 1986, the school community consisted of 550 students, thirty-seven teachers and twenty-seven auxiliary staff members. Ihungo has a long history of academic excellence. Many

leaders in government and parastatal organizations boast of Ihungo as their Alma Mater.<sup>38</sup> At the moment, the performance of the school is negatively affected by the obvious old and unrepaired physical plant and a critical shortage of teaching materials. In spite of this, in 1985, in the National Comparative Academic performance, Ihungo was the twenty-first out of 179 schools. On the production side, although Ihungo was designated by the Ministry of Education as an agricultural bias school, the land around the school is mostly infertile, rocky and infested with sangare (couch grass --a perennial weed). This situation has been so frustrating that the Ministry of Education is considering the possibility of changing the school's bias to a technical one. A summary of the school's self-reliance activities in 1985 is found in Table 9. Calculations based on the table shows that for the year 1985, production per student in this school was 163.43 shillings which was 90.79 percent of the national target of 180 shillings per student per annum. The contribution to the catering expenses was 2.53 percent as compared to the national target of 25 percent. In the national rating of production efforts in government schools, Ihungo ranked fifty-seventh out of eighty-five schools for the year 1983.

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<sup>38</sup>Parastatal Organizations are commercial organizations owned by the government participation and run on commercial principles and whose accounts are not directly integrated into government budgets. It is felt that the growth of parastatal organizations is essential to creating a socialist economy. See United Republic of Tanzania, Background to the Budget: An Economy Survey 1968-69 (Dar es salaam: Government Printer, 1968) p. 96.

TABLE 9

## SELF-RELIANCE ACTIVITIES, 1985 - IHUNGO SECONDARY SCHOOL

Name of Project	Size of Project	Value of Total Production	Cost of Production	Net Profit
Coffee plantation	0.5 hectares	9,987.85	1,000.00	8,987.85
Banana plantation	1.4 hectares	2,995.00	---	2,995.00
Cattle (zebu)	20	47,280.00	14,160.45	42,379.55
Piggery	---	9,260.00	---	---
Milling machine	1	20,245.95	9,438.80	10,807.15
Maize plantation	--	1,020.00	100.00	920.00
Co-op shop	---	595.00	---	595.00
Trees (sales from)--		23,200.00	---	23,200.00
Tea plantation	0.5 hectares	---	---	---
TOTAL		114,583.80	24,699.25	89,884.55

Source: School Records of Ihungu secondary school.

The above description thus constitutes the schools that were sampled for an intensive comparative investigation. These were ordinary secondary schools, representing various characteristics of schools in Tanzania and struggling with ordinary resources (i.e. no sophisticated mechanization or special outside aid) to make manual labor an integral part of education. In order to accomplish this in-depth study, two research techniques, namely,

participant observation and a questionnaire were used. Details of the procedures are described in the following section.

Participant Observation. In order to do any observation in the schools, it was imperative to obtain a research clearance from the relevant authorities. Since the sample was composed of five government and one TAPA owned schools, clearances and letters of introduction were obtained from the Ministry of National Education and Tanzania Parents Association, respectively. Copies of these letters are available in appendix D. These letters were to be presented to the principals of the schools and any other authority, whose assistance was needed for the study. Due to transportation and logistical problems in Dar es salaam, the writer arrived in Kagera Region with only ten weeks at his disposal for the research. Thus the original idea of spending two weeks at each school was modified and the available time was allocated as follows: one week for preliminary contacts, one week for the study of each of the six schools, two weeks for interviews and visits to places of interest in the region, and the last week for wrapping up. During the first week after his arrival, the researcher visited all the schools, making initial contacts and setting up dates for doing research in each school. This initial contact with the schools was crucial to the whole enterprise. The strategy from start to finish was to win the cooperation of the teachers and the principal. Thus the researcher first went to the staff-room informally, greeted teachers and asked one of the teachers who then led him to the

headmaster's office. The headmaster formally introduced him to the staff and gave him an opportunity to explain the purpose of his research. Being so busy, the principal usually appointed one or two teachers (academic and self-reliance co-ordinators) to assist the researcher in his study.

The actual observation in each school followed a guide (a copy is found in appendix E) prepared for gathering information related to self-reliance activities from local oral and documentary sources, observation of both classroom work and actual manual work activities in school. The original idea of grading each school as very good, good, average, poor or very poor at the end of each week, was abandoned as impractical. The researcher concentrated on recording what was observed rather than grading the schools. The observation exercise focused on the expected outcomes of the inclusion of manual work in the curriculum. The questions related to these outcomes included the following: Was the school body, that is, principal, teachers and students, manifesting a positive attitude towards the integration of work and education? What were their feelings about the implementation strategy? What were the quantitative and qualitative indicators of the success or failure of the policy? Were the students punctual, hardworking, skillful, well-organized and supervised during the manual work periods? How were the schools performing in meeting the national targets of production of 180.00 shillings net profit per student per annum and contributing 25 percent of the cost of food in the school? Were



there any visible signs that academic work, both in method and content, was being related to practical work? Were there manifestations among students of social class related attitudes towards manual work? And finally, in what sense were manual work projects helping the school to be integrated in the surrounding community?

In each school, informal conversations with teachers in the staffroom, the headmaster, teacher coordinating self-reliance activities and four student representatives proved to be a rich source of information. One day in each school was devoted to classroom observation. Form III was selected for observation because compared to Form IV they were less preoccupied with the national examinations and compared to the lower forms the classroom routine and style were more established. During the observation in the classroom, the researcher avoided lengthy introductions and noticeable note-taking, and occupied a less conspicuous seat in the back of the class. He was particularly interested in noting references made to manual work during the class period, the democratic and activity oriented teaching styles and students' self-confidence, initiative and participation in the learning process. Two days were devoted to going around observing students during the actual manual work sessions. The main points that were being checked were punctuality, organization, enthusiasm, skill-application and teachers' participation. The researcher was taken around either by teacher or students coordinators of manual work activities.

Comments by teachers and students were recorded on a small tape-recorder that could be carried in the pocket without being noticed by the subjects. This was done in order to facilitate a free exchange of ideas and to avoid walking around taking notes. More notes on observations in the staffroom, classroom and places of work were added on at the end of the day. A file was opened for each school so that appropriate information could be safely kept.

The Questionnaire. In order to collect as much data as possible within the given time, the use of a structured questionnaire was also considered useful. This paper and pencil quantifiable research tool was constructed carefully following the guidelines given by R.J. Gay.<sup>39</sup> In order to balance the restrictiveness characteristic of questionnaires, two qualitative questions were added so that respondents could freely express whatever they felt about the policy and its implementation. A copy of this questionnaire is found in appendix F. It was inspected and approved by the dissertation committee, and then pretested in one school in Tanzania before being used in the case study. In the pretesting, for example, it was found that most students were more comfortable answering the questionnaire in Kiswahili rather than in English and that it was not preferable to ask the respondents to write the name and address of the school on the top of the questionnaire. These adjustments were

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<sup>39</sup>R.J. Gay, Educational Research: Competencies for Analysis and Application, Second Edition (Columbus, Ohio: Charles E. Merrill Publishing Co., 1981), pp. 159-166.

made accordingly. The general pattern followed in each school was to give questionnaires to all teachers and to fifty randomly chosen students excluding Form I who were regarded still too new to the secondary school environment. The table below summarizes the distribution of and response to the questionnaires.

TABLE 10  
DISTRIBUTION OF AND RESPONSE TO QUESTIONNAIRE

School	Teachers		Students	
	Q/Ga.	Q/Ra.	Q/G	Q/R
Bukoba	22	16	50	41
Kahororo	18	11	50	50
Rugambwa	32	19	50	50
Nyakato	26	20	50	50
Omumwani	21	19	50	50
Ihungo	37	16	50	49
Totals	156	101	300b.	290

Note: a. Q/G = Questionnaires Given; Q/R = Questionnaires Returned.

b. The total population of students in the six schools was 2939 students.

Sixty-five percent of the teachers, 97 percent of students and 86 percent of all respondents returned the questionnaires. The researcher physically participated in giving out questionnaires to the teachers in the staffroom and made a follow up during the

week with the help of an assigned teacher. As for students, from the pretesting experience, it was more productive for the researcher to administer the questionnaire himself to the randomly chosen students gathered together in a given place at a given time. This gave him an opportunity to introduce the questionnaire, respond to questions raised and provide a free atmosphere for personal responses to the questionnaires. In spite of the expected difficulty of getting back questionnaires from teachers, the researcher was satisfied with the percentage of return and the general cooperation from all the schools.

In short, the case-cluster study of six selected schools involved participant observation in staffrooms, classrooms and at work sites, and the use of a questionnaire. Supplementary information was obtained from the schools' documents and informal interviews both within and around the schools. The data obtained were filed for analysis. The following paragraph describes how the analysis was carried out.

Analysis of Data. Depending on the type of data, two major techniques were used in the effort to find meaning in the data collected. Content analysis was applied to qualitative data and statistical analysis to quantitative data. First, qualitative data analysis was done both during and after the field study. In doing this, ideas suggested by Bogdan and Biklen were a great asset.<sup>40</sup> As the research progressed, the writer continued to

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<sup>40</sup>Robert C. Bogdan and Sari Knopp Biklen, Qualitative Research for Education: An Introduction to Theory and Methods (Boston: Allyn and Bacon, Inc., 1982), pp. 145-170.

develop and review categories and codes which were helpful in reducing, organizing and classifying the information emerging from the data collected. All in all, a code index of forty-four items was developed and a copy of it is found in Appendix G. For easy reference, the respondents were assigned numbers which could be referred to in the recording and discussing of the findings. Secondly, the quantitative data were computer-analyzed using the SPSS-program (Statistical Package for the Social Sciences). The code index that was used is found in Appendix H. The method that was used to relate both types of data and analyses to the problem being studied was "triangulation" which "brings a variety of data and methods to bear on the same problem."<sup>41</sup>

#### Validity and Reliability of the Study

In any study, issues of validity and reliability are of paramount importance. Validity refers to the degree to which instruments used in a study measure what they are supposed to measure. Reliability, on the other hand, connotes the degree to which the instruments used consistently measure whatever they measure.<sup>42</sup> As Gay suggests, there is a relationship between the two concepts:

A valid test [measurement] is always reliable but a reliable test is not necessarily valid. In other words, if a test is measuring what it is supposed to be measuring, it will be reliable and do so every time, but a reliable test can consistently measure the wrong

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<sup>41</sup>Patton, Qualitative Evaluation Methods, pp. 329-332.

<sup>42</sup>Gay, Educational Research, pp. 110-118.

thing and be invalid.<sup>43</sup>

In pure experimental quantitative studies, there are specific scientific procedures to measure both validity and reliability. In holistic inductive research, however, the validity and reliability of the study depend on the intellectual rigor and honesty of the researcher, and the accuracy and comprehensiveness of the data. Since the major interest of this type of study is not the replicability of the results but rather a deeper understanding of the problem being studied, validity is its chief concern. All the same, from Gay's statement cited above, by affirming validity one ipso facto affirms reliability. Thus, besides the intellectual rigor, perseverance and creativity applied by the researcher throughout the study, the following steps were taken to ensure validity of the findings of this study.

First, in order to ensure the content validity of the instruments used, the drafts of the questionnaire, interview guide and observation guide were discussed with the dissertation committee at Loyola University of Chicago and further suggestions were requested from some members of the Educational Research Unit of the Ministry of Education (Tanzania). Secondly, as far as sampling for interviews was concerned, the strategy of "purposeful sampling" was used whereby certain subjects were carefully chosen because they were believed qualified to facilitate or contribute to a better understanding of the

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<sup>43</sup>Ibid, p. 117.

problem. Thirdly, in the case of the questionnaires, they were distributed to all teachers of the target population and to a random sample of three hundred students out of the student population of 2939. Random sampling was used in order to ensure that the characteristics of the subjects appeared in approximately the same proportion as in the total population.<sup>44</sup> A questionnaire return of 86 percent gave additional strength to this measuring instrument. Also in order to avoid Type I errors, that is rejecting true hypotheses as false due to the power of the measuring instrument, a moderate 0.05 level of significance was chosen for quantitative results from the questionnaire.

Fourthly, in order to enhance both credibility and validity, and avoid Type II errors, that is accepting false hypotheses as true due to insufficient evidence, a two-fold methodological triangulation was used. On the one hand, the consistency of findings from different methods, that is, interviews, participant observation, documentary analysis and questionnaires was checked. On the other hand, also checked was the consistency of data from different case-cluster sources (schools) obtained by using similar methods. The relevance of "triangulation" to the problem of validity is well articulated by Patton:

Triangulation is a process by which the evaluator can guard against the accusation that a study's findings are simply an artifact of a single data source, or a

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<sup>44</sup>For random and purposeful sampling see Bogdan and Biklen, Qualitative Research, pp. 67.

single investigator's ideas.<sup>45</sup>

The above techniques used to ensure the validity of the study also enabled the writer to make tentative generalizations about secondary schools in Tanzania as a whole.

### Difficulties and Limitations of the Study

In spite of the above steps taken to ensure the thoroughness of the study, four factors had a limiting effect on the research. First, the economic situation in the country was not favorable at the time of the research. Inflation was very high, basic commodities were very expensive, transportation problems were immense, fuel was scarce, rationed and very costly. Given this situation and the financial constraints bearing on the researcher, a decision was made to limit the comparative study strategy of six secondary schools to only one region instead of spreading the selected schools over several regions. Moreover since economic survival was the uppermost concern in the country, requests by the researcher from the subjects of the study for their time and energy were only grudgingly granted and sometimes altogether rejected.

Secondly, generally the role of a researcher is still quite obscure in Tanzania. There is a sort of suspicion in answering

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<sup>45</sup>Patton, Qualitative Evaluation Methods, p. 332. Further Readings see Norman K. Denzin, Sociological Methods: A Sourcebook (New York: MacGrawal-Hill Book Company, Second Edition, 1978), pp. 322-3, 339-380 and id., The Research Act: A Theoretical Introduction to Sociological Methods Chicago: Aldine Publishing Company, 1970), pp. 26-27, 301-313.



the questions posed by a researcher. There is also a danger of people answering questions in accordance with the current ideology of the party, in order to avoid trouble. Thus, the researcher had to consistently assess what the respondents meant by what they wrote or said. In addition, a certain coldness towards external researchers exists among local academicians. There is a feeling that external researchers go to the country to "milk" local researchers, exploit the field material for their own benefit and return precious little in terms of collaboration efforts, not even simple acknowledgement. Although the researcher had the advantage of being a citizen and could utilize the extended links of kinship and friendship, he had to bear the above factors in mind.

Thirdly, there were limitations regarding the focus of the study. With the amount of time and resources available, the researcher concentrated on the issues of internal efficiency. Very little was done to deal with external efficiency, namely, to investigate the lasting impact of the policy on those who graduated from secondary schools practicing the policy of integrating manual work with education. Also the study did not satisfactorily survey the attitudes of the parents towards the policy. The conclusions that were reached in that regard were based on available literature, personal experience, observations by teachers and students and a few parents--six of them--that were interviewed. Last, but not least, two lapses of malaria at the beginning and end of the field study robbed the researcher of

the precious time and energy which could have been used to gather more data for the study.

Notwithstanding the above, the author was quite satisfied both with the cooperation received and the data collected as being sufficient for a valid study, however, conclusions from them should be taken as suggestive. In the following two chapters, the findings will be presented and discussed.

## CHAPTER V

### A PRESENTATION OF QUANTITATIVE FINDINGS OF THE STUDY

#### Statement of Research Hypotheses

In accordance with the explicit aims, mentioned earlier in Chapter I, for the inclusion of manual work in the secondary school curriculum, and taking into account the nineteen-year period since the introduction of the policy in 1967, the researcher expected the results from the questionnaire to confirm the following seven core hypotheses.

1. The aims of "self-reliance activities" would be well and comprehensively understood in the school context.
2. "Self-reliance activities" would be viewed in the school context as helping to alleviate government expenditure on education.
3. Manual work projects in schools would be seen as positively contributing to building self-reliance attitudes of cooperation and appreciation of manual work among students.
4. Manual work projects would be a practical demonstration of the effort to impart to the young knowledge and skills necessary for rural and urban development.
5. Teachers, whose attitudes to a great extent reflect and are reflected in their students, would exhibit a

positive attitude towards manual work.

6. Students would manifest a favorable attitude towards the policy.
7. Parents would be regarded as supportive of the policy that seeks to make education practical and relevant to the local needs.

Corollary to the above hypotheses and relevant to the general evaluation of the policy of inclusion of manual work in schools, are the following five questions in which the investigator was interested. First, is the policy considered a progressive step in Tanzanian educational development or not? Secondly, which is thought to be the preferred model of secondary school: the academic model or work-education integration model? Thirdly, what is considered to be the impact of the policy on academic performance of schools? Fourthly, is the involvement in sr-activities perceived as having a significant impact on the students' chances for higher education? Last but not least, what are the feelings in the school communities regarding the fairness of the methods, used both by schools and the National Examinations Council, in assessing students' performance in "self-reliance activities?"

In the following section of the chapter, findings from the questionnaire that was distributed to 391 respondents, regarding the above-mentioned research hypotheses and questions are presented. Table 11 is a summary of chi-square analysis of some of the results that are reported in this chapter.

TABLE 11

SUMMARY OF SOME STATISTICALLY SIGNIFICANT  
RESULTS OF THE STUDY<sup>1</sup>

	Chi-square	D.F.	Significance
1. Schools X impact of policy on academic performance	28.54	10	0.0015
2. Schools X preferred model of secondary school	16.79	5	0.0049
3. Schools X teachers' support of policy	22.36	10	0.0134
4. Schools X policy as progressive step in secondary education	32.30	20	0.0402
5. Schools X teachers' attitudes towards the policy	44.30	20	0.0014
6. Schools X students' attitudes towards the policy	49.34	20	0.0003
7. Schools X manual work as enhancing academics	38.39	20	0.0079
8. Schools X policy helps the acquisition of urban skills	41.33	20	0.0034
9. Schools X policy helps schools economically	39.47	20	0.0058
10. Schools X policy affects chances to higher education	37.27	20	0.0109
11. Schools X policy promotes SR/ attitudes of cooperation and appreciation of manual work	41.03	20	0.0037
12. Schools X aims of SR/activities in schools	29.45	20	0.0793*
13. Position in school X aims of SR/activities	14.66	8	0.0660*
14. Position in school X acquisition or rural skills	19.76	8	0.0113
15. Position in school X Parents' attitudes towards policy	48.79	8	0.0000
16. Position in school X most emphasized goal	22.71	6	0.0009
17. Position in school X teachers' support of policy	30.48	4	0.0000

<sup>1</sup>This summary of chi-square analysis is provided for the interest of the researcher. The complete tables for some of these will be provided in the text of this chapter and others are found in Appendix L. Other tables of statistically significant results quoted in the study will not be reproduced, however, they are available from the author.

18.	Position in school X students' support of policy	51.66	4	0.0000
19.	Position in school X parents' support of policy	47.74	4	0.0000
20.	Position in school X school's method of assessment	69.72	4	0.0000
21.	Position in school X National Examinations Council's method of assessment	63.04	4	0.0000
22.	Sex X aims of self-reliance activities	10.66	4	0.0306

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Note:

\*The level of statistically significant results for this study was set at 0.05 and below. These two are borderline cases. They are, however, included in this summary because of their having practical significance to the study.

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In looking at the percentages in support of the hypotheses under investigation, the author will use the following criteria: (1) 100-75 percent will be considered a strong support of hypothesis; (2) 70-50 percent as "problematic" or somewhat support the hypothesis; and (3) below 50 percent as a poor support of the hypothesis. In responses which required degrees of agreement or disagreement, the researcher will regard the extremes of the scale as constituting significant statements of the respondents. This strict stance is prompted by three main reasons. First, nineteen years of policy implementation calls for a strict evaluation. Secondly, as other researchers have commented on the situation, there is a strong tendency in schools for items on questionnaires to be responded to according to the official party ideology or to give "politically acceptable [or

safe] answers."<sup>2</sup> In view of that, the researcher, will regard the responses "agree," "undecided," "disagree" and "somewhat fair" as to a great extent masking the non-committal attitudes of the respondents. Those who agreed or disagreed strongly or declared that the policy was either very fair or not fair at all, were making significant statements worthy of consideration. Thirdly, the popular and almost taken-for-granted assumption that the policy under investigation is universally accepted needs strict and serious reviewing. With the above criteria, brief comments are made on the statistical results of each question. However, to avoid duplication, further comments and discussion are reserved for chapters six and seven which will try to synthesize and draw conclusions from both quantitative and qualitative data.

### The Core Hypotheses

Comprehension of the Aims of Self-reliance Activities. One of the main concerns of this study was to determine to what extent the goals of self-reliance activities were understood in the schools. The need of such information is relevant to the study because the success of any program very much depends on the proper understanding of its aims by the implementors. This is even more so in the Tanzanian model of development which to a high degree emphasizes "persuasion" rather than "coercion" in the

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<sup>2</sup>Oswald Almasi, "Implementation of Education for Self-reliance: The Case of bias-designed and bias-accepted agricultural secondary schools in Tanzania" (M.A. dissertation, University of Dar-es-salaam, 1985), p. 53.

implementation of development policies. Earlier studies, however, had uncovered a state of confusion regarding the aims of self-reliance activities. Lema in 1972 had this to report in his research:

Many of the negative attitudes revealed during the interviews are caused by misconceptions about the true meaning of education for self-reliance. Some teachers for example, did not fully understand the implications of the new policy, nor were they sufficiently sure how to interpret its significance to their pupils.<sup>3</sup>

Nkonoki, in 1977, noted the same when he said that "there has been misleading impression created in some schools that the policy of ESR is nothing else but the toil and sweat in the farm."<sup>4</sup> Accordingly, the researcher wanted to know if this situation had changed by 1986. In order to test if the aims of productive labor in school were comprehensively understood, respondents were asked the following question: Which of the following statements best fit your understanding of the aim(s) of self-reliance activities in your school (more than one answer may be given)? Five options were possible: (1) to alleviate government expenditure on education; (2) to foster positive attitude towards manual work; (3) to develop in the young adequate knowledge and practical skills appropriate to rural and

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<sup>3</sup>Anza A. Lema, Education for Self-Reliance: A Brief Survey of Self-Reliance Activities in some Tanzanian Schools and Colleges (Dar-es-salaam; University of Dar-es-salaam, Institute of Education, 1972), p. 40.

<sup>4</sup>Simon R. Nkonoki, "Education for Self-reliance: An Analysis of Nyerere's Philosophy of Education and its implementation in Secondary Schools" (Ph. D. dissertation, University of Dar-es-salaam, 1977) p. 417.



urban development; (4) to apply what is learned in the classroom; and (5) all of the above. The researcher expected that, if indeed, the aims of sr-activities were comprehensively understood, the majority of the respondents would choose answer number five. The following is the outcome to the above item of the questionnaire.

Taking type of school as an independent variable, the results were statistically significant at 0.0793 (see Appendix L, Table 39). School numbered 1 had the lowest percentage -- only 13.6 percent of that school community had a comprehensive understanding of the aims of sr-activities.<sup>5</sup> This finding would seem to confirm the remark made by other researchers that schools situated in an urban environment are at a disadvantage in properly implementing and hence grasping the true meaning of sr-activities.<sup>6</sup> Similarly, school numbered 5, with the next lowest percentage (23.3 percent of that community) of those who understood the goals of productive activities comprehensively, confirms another finding of Maliyamkono that private schools put less emphasis on productive activities and hence the possibility of not understanding well their aims.<sup>7</sup> The high percent of school numbered 2 (45.9 percent) could be attributable to the fact that

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<sup>5</sup>The numbering of the schools investigated is arbitrary in order to keep them anonymous.

<sup>6</sup>Ted L. Maliyamkono, The Unproductive School (Dar-es-salaam: Africana Publishers Ltd, 1982) p. 46.

<sup>7</sup>Ibid.

the good organization of sr-activities as observed in that school has facilitated the better understanding of the aims of policy. In contrast, school numbered 4 has only 32 percent of the community with a comprehensive understanding of the aims, probably due to the poor organizational state of sr-activities as was observed in that school. The two other schools, numbered 3 and 6, which are supposed to be higher in consciousness regarding national policies because they are A-level schools, had respectively 31.9 and 32.3 percent of their communities with comprehensive understanding of the aims of sr-activities. This could be interpreted as some expression of their critical appraisal of these aims.

Looking at the total, the results do show that only 32.7 percent of the respondents had a comprehensive understanding of the goals of sr-activities; 48 percent, highest of the responses, point to the development of knowledge and skills as the aim of sr-activities; the politico-ideological aim has only 4.9 percent of the responses; and the economic aim of sr-activities has the least support of the respondents (only 2.6 percent).

The message one may infer from the results is threefold. First, in spite of the long period of political education, the aims of sr-activities in schools are not comprehensively understood. Secondly, although Uzalishaji mali ("production of wealth") for alleviation of government expenditure on education has been so much emphasized in schools, results seem to suggest that school communities do not buy into that emphasis. Thirdly,

results show a strong tendency to favor the technical-educational goal of sr-activities. One could read in the two latter points a sort of "wishful thinking" in these school communities for a technical-educational rather than ideological and economic orientation of productive activities in schools.

Taking the position of respondents in schools (principals, teachers, students) as an independent variable, the results are statistically significant at 0.0660, as shown in Table 12 below.

TABLE 12

POSITION IN SCHOOL BY AIM OF SR/ACTIVITIES IN SCHOOL  
(PIS X AS)

	1		2		3		4		5		Total	
PIS	No	%	No	%	No	%	No	%	No	%	No	%
1	-	-	-	-	1	20.0	1	20.0	3	60.0	5	1.3
2	4	4.1	7	7.2	34	35.1	16	16.5	36	37.1	97	24.8
3	6	2.1	12	4.2	155	53.6	27	9.3	89	30.8	289	73.9
Total	10	2.6	19	4.9	190	48.6	44	11.3	128	32.7	391	100.0

Chi-square = 14.66    D.F. = 8    Significance = 0.0660

Whereas it was expected that principals of schools would have a comprehensive understanding of the aims of productive labor in schools, the results show that only three out of five principals meet that expectation and none of them checked either the economic or politico-ideological aims. Thirty-seven percent of the teachers appear to have a comprehensive view of the aims, 4.1 percent only mentioned the economic aim, 7.2 percent, the

politico-ideological aim and 35 percent, the development of knowledge and skills for rural development. As for students, the percentage of the responses were distributed as follows: 2.1 percent for the economic aim, 4.2 percent for the politico-ideological aim, 53.6 percent for the technico-educational aim and 30.8 percent for comprehensive understanding of the aims. The difference between teachers and students regarding the percentage of those who have a comprehensive understanding of the aims is an expected outcome, since teachers are supposed to be more informed about the policy than their students. The overall message, however, is similar to that of the previous paragraph -- the great majority of teachers and students do not have a comprehensive grasp of the aims of productive labor in schools, the economic and ideological aims are not stressed by the results, and the technico-educational aims is highlighted.

The same pattern of responses reappears when sex is taken as an independent variable. The results, under this aspect, are statistically significant at 0.0306 (see Appendix L, Table 43). Out of a hundred female respondents, only 30 percent had a comprehensive view of the aims. None mentioned the economic aim. Five percent indicated the ideological aim and 59 percent were for the development of knowledge and skills. Of the 286 responses from the male respondents, 34.3 percent were for comprehensive view of the aims, 3.5 percent for the economic aim, 4.5 percent for the ideological aim and 44.4 percent for the technico-educational aim. The remarkable difference between males and

females who had a comprehensive view of the aim of self-reliance activities may be due to cultural conditioning. In a country like Tanzania, which is still very much a gemeinschaft society, dominated by rural values, females tend to be more conforming to the establishment than males, thus making less effort to understand the rationale given for different policies. Although several steps are being taken to rectify this situation, a spill-over of some cultural conditioning is still noticeable. All in all, the substance of the statistical message as discussed in these three paragraphs is clear: the hypothesis that the majority in schools have a comprehensive understanding of the aims of productive activities is not tenable; the results seem to de-emphasize both the politico-ideological and economic aims, while highlighting the technico-educational aim of self-reliance activities. The possible explanation and implications of these findings are discussed in the following two chapters.

The Economic Contribution of Self-reliance Activities. Another important concern of the study was getting the inside view from the schools regarding the economic contribution of productive activities. The author was curious to verify if the optimism portrayed by the Ministry of Education officials and reports was shared by the school communities under study. Table 13 (see following page) illustrates that sort of optimism.

For example, looking at the unit profit per student for 1984 and in view of the expected profit per student of 180 shillings per annum, 322.50 shs. profit is indicative of a positive

economic contribution of self-reliance activities in schools.<sup>8</sup> The inaccuracies and inadequacies involved in the methods of gathering such data, however, suggest the need of small scale case studies in order to know more about what is really happening in schools. In order to get such information for this case study in question, a statement, "self-reliance activities do help the schools economically," was presented to the respondents.

TABLE 13

ECONOMIC PRODUCTION ACTIVITIES IN PUBLIC  
SECONDARY SCHOOLS: 1980 - 1984

	1980	1981	1982	1983	1984
1 Investment (Production Costs) Shs.	8,238,198.35	12,605,497.10	14,413,570.70	17,038,004.70	24,044,689.35
% Increase		53.0	14.3	18.2	41.1
2 Income (Shs)	11,058,108.50	15,855,817.10	20,704,561.10	25,587,431.75	37,234,909.75
% Increase		43.4	30.6	23.6	45.5
3 Profit/loss (Shs)	2,819,910.15	3,250,320.00	6,290,990.40	8,549,427.05	13,190,220.40
% Increase		15.3	93.5	35.9	54.3
4 Unit profit per student	73.30	85.60	161.60	215.15	322.50
% Increase		16.8	88.8	33.1	49.9

Source: The United Republic of Tanzania, Basic Education Statistics in Tanzania 1980 - 1984 (Dar-es-salaam: The Ministry of Education, June 1985), p. 11.

<sup>8</sup>Ministry of Education (Tanzania), Directive on Implementing Production Activities in Schools and Colleges, Ref. No. EDF/100/7 of 24 March 1980.

They were asked to indicate as to whether they "strongly agree," "agree" are "undecided," "disagree," or "strongly disagree," with the statement. The results are presented hereafter. For reasons mentioned earlier, the researcher's attention was focused on those who strongly agreed or disagreed with the statement.

First, taking the type of school as an independent variable, the results are statistically significant at 0.0058 (see Appendix L, Table 36). The percentages of those who strongly support the statement vary from 64.2 percent to 29.9 percent. The unexpected 64.2 percent strong support for school numbered 5 which is a private school with a least organized self-reliance activities program and 49.1 percent strong support for school numbered 1 which is an urban school, may be indicative of the noted tendency among respondents to give politically acceptable answers. The contrast between school numbered 2 with 59.0 percent and school numbered 4 with 29.9 percent correlates well with the state of the organization of self-reliance activities in those schools. In the former, the program of productive labor is well organized, whereas in the latter school, the program is poorly organized. The 42.2 percent in school numbered 6, a boys' A-level school and 48.5, a girl's A-level school, perhaps is indicative of the courage in senior secondary schools to critically evaluate the situation. The strongest opposition to the statement shows up in school numbered 4 (13.4 percent) with the least organized self-reliance projects and in school numbered 6 (3.1 percent), which is a boys' A-level school. On the whole, the result shows that

48.7 percent of the respondents strongly support the statement while 3.9 percent strongly disagree with the statement.

Secondly, taking position of respondents in the school as an independent variable, the results are statistically significant at 0.0001, as shown in Table 14.

TABLE 14

POSITION IN SCHOOL BY ECONOMIC CONTRIBUTION  
OF SELF-RELIANCE ACTIVITIES  
(PIS X ECSR)

	1		2		3		4		5		Total	
PIS	No	%	No	%	No	%	No	%	No	%	No	%
1	1	20	4	80	-	-	-	-	-	-	5	1.3
2	28	29.2	51	53.1	6	6.3	9	9.4	2	2.1	96	25.1
3	157	55.9	80	28.5	19	6.8	12	4.3	13	4.6	281	73.6
Total	186	48.7	135	35.3	25	6.5	21	5.5	15	3.9	382	100.0

Chi-square = 31.91    D.F. = 8    Significance = 0.0001

Of the five principals responding to the item, only one strongly supports the statement that productive activities were significantly alleviating government expenditures on education, while the other four are satisfied with a noncommittal statement. Only 29.2 percent of the teachers and 55.9 percent of students strongly support the statement. The difference between the percentages of teachers and students is probably explainable by the fact that teachers are in a better position than students to evaluate the total situation. On the whole, however, the 48.7 percent strong agreement with the statement does not seem to



render the hypothesis safely tenable. This inference takes into account the fact that only one out of five principals strongly supported the hypothesis and, moreover, the total percentage of those who strongly supported the hypothesis is inflated by the student percentage. In short, with the awareness that school productivity varies from place to place, the results of this case study do not seem to support the hypothesis that self-reliance activities significantly contribute to the alleviation of government expenditure on education. This finding seems to support the empirical findings quoted by Cooksey:

In terms of covering running costs, few schools have been able to meet the 25 percent target. According to the International Labour Office (ILO) (ILO/JASPA, 1982, p. 112: '. . . in 1977 self-reliant production activities accounted for only three percent of the expenditure and in 1980 a figure of five percent is mentioned.' In 1984, three-quarters of agriculture bias schools failed to reach the 25 [percent] target (Almasi, 1985).<sup>9</sup>

More will be said about this aspect of the findings in the chapters that follow.

The Promotion of Self-Reliance Attitudes of Cooperation and Appreciation of Manual Work. In introducing "productive labor" in schools, the main objective of the policy makers was manifestly politico-ideological. Since Tanzania has chosen the socialist path of development, it is felt that education should prepare the young to develop attitudes compatible with a socialist model of development. Of great concern is the

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<sup>9</sup>Brian Cooksey, "Policy and Practice in Tanzanian Secondary Education since 1967", International Journal of Educational Development 6 (1986): 191.

development of a "socialist work-ethic" among the young. Thus self-reliance activities are expected to promote the essentials of a socialist work-ethic, namely, an appreciation of manual work and a cooperative spirit in work. The "die-hard," inherited colonial attitudes of individualism and contempt of manual work were not going to be easily eradicated, though Lema in 1972 had expressed this optimism. He pointed out that "the contemptuous feeling that regarded manual work as being below the dignity of a person undertaking academic studies may still not have disappeared completely but it is dying out gradually."<sup>10</sup> Consequently, the third concern of this study was to find out if it is indeed felt in the school communities that manual work projects are successfully building a positive attitude towards manual work and a spirit of cooperative endeavor. In order to get information regarding this aspect of the study, respondents were requested to indicate the degree of their agreement or disagreement with the statement that: the policy of inclusion of manual work in the school curriculum is indeed promoting cooperation and appreciation of manual work among students. The results are as follows.

First, taking the type of school as an independent variable, the results obtained are statistically significant at 0.0037 (See Appendix L, Table 38). The percentage of those who strongly supported the statement range from 49.1 percent to 27.5 percent.

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<sup>10</sup>Lema, Education for Self-Reliance: A Brief Survey of Self-Reliance Activities, p. 50.

The high 49.1 percent in school numbered 1 is another example of respondents giving politically acceptable answers. This school is typically urban, experiencing all problems of involving students in productive labor. Hence, one would not expect such high percent of those affirming the statement. The 48.3 percent in school numbered 2 seems to be legitimate as that school has a well organized and functioning program of productive activities. Similarly, the 27.5 percent support in school numbered 4 is explainable in view of the fact that "self-reliance" activities in that school are not so well run. The 28.1 percent in school numbered 6 alludes to the daring attitude of A-level boys' school to be critical of the policy implementation. Taking the schools together, only 37.5 percent strongly supported the statement. Certainly, this result does suggest that the hypothesis is poorly supported and there is a need to explore the possible causes that may lie behind this outcome.

Secondly, taking the position of respondents in school as in independent variable, the results are statistically significant at 0.0000, as shown in Table 15.

Of the five principals responding to this item of the questionnaire, none of them strongly supported the statement. Three of them just agreed, one disagreed and one strongly disagreed with the statement. As for teachers, only 15.5 percent strongly supported the statement, 54.6 percent minimally agreed and 6.2 percent disagreed strongly with the statement. There were 45.6 percent of the students who strongly supported the statement

and 31.6 percent who just agreed. However, the high percentage of support from students should be taken with a grain of salt. As the Latin saying goes: "Nemo iudex in propria causa" (nobody is the right judge in his own case), it is conceivable that students in this case are giving themselves the benefit of doubt. Like in the previous paragraph, the statistical message of the results is that the research hypothesis rests on very shaky ground, especially when one reads between the responses of teachers and students. Qualitative findings will throw some light on the possible reasons why the hypothesis under investigation is poorly supported.

TABLE 15

POSITION IN SCHOOL BY SR-ATTITUDES  
(PIS X SRATT)

	1		2		3		4		5		Total	
PIS	No	%	No	%	No	%	No	%	No	%	No	%
1	-	-	3	60	-	-	1	20	1	20	5	1.3
2	15	15.5	53	54.6	17	17.5	6	6.2	6	6.2	97	25.1
3	130	45.6	90	31.6	32	11.2	16	5.6	17	6.0	285	73.6
Total	145	37.5	146	37.7	49	12.7	23	5.9	24	6.2	387	100.0

Chi-square = 36.52    D.F. = 8    Significance = 0.0000

The Acquisition of knowledge and skills for rural and urban development. The fourth research hypothesis to be investigated concerned the policy as helping the acquisition of knowledge and skills required for both rural and urban development. Also on the

mind of the researcher was the question: Are self-reliance activities helping to integrate theory and practice? In order to get the opinion of the respondents on this, two statements were presented to them: (1) the policy is helping the acquisition of rural skills, and (2) the policy is helping the acquisition of urban skills. The respondents were asked to indicate their degree of agreement or disagreement with these two statements.

First, taking position in school as an independent variable, the results regarding the acquisition of rural skills that came out are shown in the following table (Table 16).

TABLE 16

POSITION IN SCHOOL BY ACQUISITION OF RURAL SKILLS  
(PIS X ARS)

	1		2		3		4		5		Total	
PIS	No	%	No	%	No	%	No	%	No	%	No	%
1	1	20.0	4	80.0	-	-	-	-	-	-	5	1.3
2	24	25.0	48	50.0	12	12.5	8	8.3	4	4.2	96	25.1
3	124	44.1	92	32.7	23	8.2	19	6.8	23	8.2	281	73.6
Total=149	39.0		144	37.7	35	9.2	27	7.1	27	7.1	382	100.0

Chi-square = 19.76    D.F. = 8    Significance = 0.0113

Of the five principals, one strongly supported the statement while the other four just agreed with it. Out of ninety-six teachers, 25 percent of them strongly supported the statement and 4.2 percent strongly disagreed with it. Out of 124 student responses, 44.1 percent strongly supported and 8.2 percent strongly disagreed with the statement. On the whole, only 39.0

percent of all responses were in strong support of the statement. Thus, it appears that the research hypothesis is very poorly supported.

Secondly, the results regarding the acquisition of urban skills, taking position in school as an independent variable are provided in Table 17.

TABLE 17

POSITION IN SCHOOL BY ACQUISITION OF URBAN SKILLS  
(PIS X AUS)

	1		2		3		4		5		Total	
PIS	No	%	No	%	No	%	No	%	No	%	No	%
1	-	-	2	40	2	40	1	20	-	-	5	1.3
2	7	7.4	25	26.3	16	16.8	32	33.7	15	15.8	95	24.7
3	68	23.9	64	22.5	43	15.1	55	19.4	54	19.0	284	74.0
Total	75	19.5	91	23.7	61	15.9	88	22.9	69	18.0	384	100.0

Chi-square = 21.69    D.F. = 8    Significance = 0.0055

As the results show, none of the five principals strongly supported the statement; only 7.4 percent of 95 teachers strongly supported the statement and 23 percent of 284 students' responses were in strong agreement. The difference between teachers' and students' responses can be explained by the fact that students are more likely to give politically acceptable answers than teachers, who are in a better position to assess the situation. On the whole, the 19.5 percent strong support and 18 percent strong disagreement from all the respondents seem to suggest that the research hypothesis is not tenable. This finding also seems

to confirm the general impression that "self-reliance activities" have been generally agriculture-oriented with very few if any productive activities with urban orientation. Thus, the statistical results regarding the two statements do not support the hypothesis that self-reliance activities are significantly promoting the acquisition of knowledge and skills required for rural or urban development. This message seems to agree with Nkonoki, who after his research in 1977, noted that "low yields per acre in agricultural projects of many secondary schools are an indication that there is still little, if any merger of theory and practice in the life and activities of schools."<sup>11</sup> Qualitative findings in chapter six will shed more light on this aspect of the study.

Teachers' Attitudes towards Productive Labor in Schools. The literature on the philosophy and implementation of education for self-reliance has strongly emphasized the pivotal role of teachers' attitudes in the successful implementation of the policy. The empirical research, however, has not been supportive of the fact that teachers' attitudes are positive to the policy. Lema, in 1972, noted that

the most disturbing revelation of the research is the evidence that the old attitudes which venerate academic education as a symbol of wealth and status are still held by a large number of school teachers themselves. . . . Only a few still argue openly that a teacher's main concern for his pupils is to give him/her academic education, or that manual

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<sup>11</sup>Nkonoki, Education for Self-Reliance: Philosophy and Implementation, p. 435.

work has no place in the school.<sup>12</sup>

Lema also remarked that though teachers may not openly show their opposition to the policy for fear of jeopardizing their legitimacy, their actions speak loud. This was then, the underlying anxiety behind the fifth hypothesis of this study regarding teachers's attitude towards manual work and their support of the policy. To get information about this, two statements with similar content were presented to the respondents.

The first statement presented to the respondents was: "The policy of inclusion of manual work in secondary school curriculum is supported by teachers." The respondents were required to choose one of three responses: "a lot," "somewhat," or "not at all." The results which were significant at 0.0000 are given in Table 18.

TABLE 18

POSITION IN SCHOOL BY TEACHERS' SUPPORT OF POLICY  
(PIS X SOPTRMW)

	1		2		3		Total	
PIS	No	%	No	%	No	%	No	%
1	-	-	3	75	1	25	4	1.2
2	33	35.5	57	61.3	3	3.2	93	27.3
3	154	63.1	80	32.8	10	4.1	244	71.6
Total	187	54.8	140	41.1	14	4.1	341	100.0

Chi-square = 30.48      D.F. = 4      Significance = 0.0000

<sup>12</sup>Lema, Education for Self-Reliance: A Brief Survey, p. 51.



From the table, none of the four principals indicated that teachers supported the policy a lot. Three were for "somewhat" and one expressed the opinion that they did not support the policy at all. Out of the ninety-three teachers, 35.5 percent indicated "a lot" and 3.2 percent "not at all." As for students, 63.1 percent indicated "a lot" and 4.1 percent, not at all. The difference between teachers' and students' strong support of the statement may be explained by the possibility of students not making the subtle distinction between rhetorical and actual support of the policy. In spite of the overall 54.8 percent indication that teachers support the policy "a lot", the teachers' critical assessment of themselves implies that their support of the policy is not firmly established.

The second statement presented to the respondents was: "Teachers wholeheartedly accept the inclusion of manual work in the curriculum." The respondents were requested to indicate the degree of their agreement or disagreement with the statements. Table 19 shows the results which were significant at 0.0000.

The results show that none of the five principals strongly held the opinion that teachers wholeheartedly accept manual work in the curriculum. Two of them just agree; three did not like to commit themselves. Of the 96 teachers, only 11.5 percent agreed strongly 4.2 strongly disagreed with the statement. The students' responses indicate that 37.8 percent strongly agreed and 3.5 percent strongly disagreed with the statement. As a whole, 30.7 percent of all respondents strongly support the statement while

3.6 percent strongly oppose it. Thus, the results on both statements seem to suggest that the school communities that were investigated do not significantly support the hypothesis that teachers clearly show a positive attitude towards the policy of productive labor in schools. Indications of this from teachers' actions and words will be suggested in chapter six dealing with qualitative findings.

TABLE 19

POSITION IN SCHOOL BY TEACHERS' ATTITUDES  
(PIS X TATT)

	1		2		3		4		5		Total	
PIS	No	%	No	%	No	%	No	%	No	%	No	%
1	-	-	2	40	3	60	-	-	-	-	5	1.3
2	11	11.5	44	45.8	15	15.6	22	22.9	4	4.2	96	25.0
3	107	37.8	93	32.9	56	19.8	17	6.0	10	3.5	283	73.7
Total	118	30.7	139	36.2	74	19.3	39	10.2	14	3.6	384	100.0

Chi-square = 47.07    D.F. = 8    Significance = 0.0000

Students Attitudes towards Manual Work in the School Curriculum. The next research hypothesis concerned students' attitudes towards manual work and the policy of its inclusion in the curriculum. To obtain information on this from respondents this statement was presented to them: "Students agree to the inclusion of manual work in the curriculum." The respondents were required to indicate the degree of their agreement or disagreement. The results of the inquiry are given in Table 20.

TABLE 20

POSITION IN SCHOOL BY STUDENTS' ATTITUDES  
(PIS X SATT)

	1		2		3		4		5		Total	
PIS	No	%	No	%	No	%	No	%	No	%	No	%
1	-	-	2	40	1	20	2	40	-	-	5	1.3
2	1	1.0	29	29.9	27	27.8	23	23.7	17	17.5	97	25.1
3	76	26.8	95	33.5	60	21.1	25	8.8	28	9.9	284	73.6
Total	77	19.9	126	32.6	88	22.8	50	13.0	45	11.7	386	100.0

Chi-square = 46.32    D.F. = 8    Significance = 0.0000

The results show that of the five principals, none of them strongly agrees, two just agree, one is undecided and two disagree. Of the ninety-seven teachers, only one percent strongly agree, 29.9 percent agree and 17.5 percent disagree strongly. As for the students, only 26.8 percent agree strongly and 9.9 percent disagree strongly. All in all, only 19.9 percent strongly agree and 11.7 percent disagree strongly.

In order to gather more evidence on the same research hypothesis, another statement which was different in form but similar in content was presented to the respondents. To the statement, "The policy of inclusion of manual work in the secondary school curriculum is supported by students," respondents were asked to choose between "a lot," "somewhat," and "not at all." The results which are statistically significant at 0.0000 are given in Table 41 of Appendix L. Of the four principals who responded to this item of the questionnaire, none of them indicated "a lot," and all the four indicated a

"somewhat" agreement with the statement. Of the 78 responses for teachers, 9.0 percent were for "a lot," 47.4 percent for "somewhat," and 23.6 percent for "not at all." Responses from 249 students were spread out as follows: 48.2 percent for "a lot," 35.3 percent for "somewhat" and 16.5 percent for "not at all." Again the differences between teachers' and students' responses for "a lot" may be due to the natural tendency of students to give themselves the benefit of doubt and the better position of the teachers to evaluate the students. For all responses, the percentages 38.4, 39.0 and 22.7 are for "a lot," "somewhat," and "not at all" respectively. Indeed the results on both statements do not support the hypothesis that students significantly show positive attitude towards the policy of productive labor in schools. This finding seems to confirm what Cooksey alludes to as a "distaste for manual labour" among students. He goes on further to quote the 1977 study of Nkonoki which concluded that bad implementation of sr-activities had

precipitated the undesirable attitude that this 'self-reliance' was, in the final analysis, equivalent to manual labour, In this way a negative reinforcement took place and some students developed a strong dislike of physical labour in general and resentment of farming in particular.<sup>13</sup>

Further elucidation of this finding will be provided by qualitative data in chapter six.

Parents' Attitudes towards Manual Work in the School Curriculum. The importance of parents' attitudes in the imple-

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<sup>13</sup>Cooksey, "Policy and Practice in Tanzanian Secondary Education," p. 191.

mentation of ESR policies was influenced by Foster when he said that unless they change they will tend to subvert the aims of the policies to be implemented.<sup>14</sup> Accordingly then, the seventh hypothesis of this study was concerned with finding out the opinion of the school communities regarding parents' attitudes towards productive labor in schools. Two statements that were framed differently but containing the same idea, were presented to the respondents. To the first statement, "Parents prefer an academic-oriented to an integrated (work and academic) curriculum for their children," respondents were requested to indicate the degree of their agreement or disagreement with the statement. The results are presented in Table 21.

TABLE 21

POSITION IN SCHOOL BY PARENTS' ATTITUDES TOWARDS POLICY  
(PIS X PATT)

	1		2		3		4		5		Total	
PIS	No	%	No	%	No	%	No	%	No	%	No	%
1	1	20.0	3	60.0	1	20.0	-	-	-	-	5	1.3
2	22	22.9	29	30.2	32	33.3	8	8.3	5	5.2	96	24.9
3	63	22.2	48	16.9	39	13.7	54	19.0	80	28.2	284	73.8
Total	86	22.3	80	20.8	72	18.7	62	16.1	85	22.1	385	100.0

Chi-square = 48.79    D.F. = 8    Significance = 0.0000

<sup>14</sup>Philip I. Foster, "Education for Self-Reliance: A Critical Evaluation." In Richard Jolly, ed. Education in Africa: Research and Action (Nairobi: East African Publishing House, 1969), p. 89.

The table shows that among the five principals who responded to the idea, one strongly agree, three barely "agreed" and one was "undecided." Of the ninety-six responses from the teachers, 22.9 percent strongly agreed, and 5.2 percent strongly disagree. As for students, of the 284 responses, 22.2 percent strongly agreed and 28.2 percent strongly disagreed. The overall outcome of the responses is 22.3 percent for strong agreement and 22.1 percent for strong disagreement. The difference between teachers and students regarding the strong disagreement is explainable by the fact that students are more in touch with the wishes of their parents and hence are in a better position to assess their attitudes. The results of this table then suggest that parents attitudes are not significantly positive towards the integrated model of school curriculum.

To gather the opinions regarding the second statement, "The policy of inclusion of manual work in the secondary school curricula is supported by parents," respondents were required to choose answers from "a lot," "somewhat," and "not at all." The results are statistically significant at 0.0000 and are available in Table 42 of Appendix L. The statistics laid out in the table show among others that only three principals chose to answer this item on the questionnaire: one agreeing "a lot" and the other two only "somewhat." Of the 79 responses from teachers, the percentages 12.7, 51.9 and 35.4 were for "a lot," "somewhat," and "not at all" respectively. The 239 students' responses were distributed as follows: 56.1 percent for "a lot," 28.9 percent

for "somewhat" and 15.1 percent for "not at all." For all responses, 45.2 percent were for "a lot," 39.9 percent "somewhat" and 19.9 percent "not at all." The statistical message one obtains from the results on the two statements is that the hypothesis that parents have positive attitudes towards manual work in schools is poorly supported. This finding would seem to agree with comments made by Psychas in his 1982 study. Based on studies done in 1969 by the Institute of Education (Tanzania), Maria Kasindi Kamm in 1975 and D. M. Sifuna in 1976, regarding parents' expectation and aspirations about the education of their children, Psychas noted the following.

Contrary to government's plan, parents are not particularly keen that their children take up jobs on farms after schooling. To them going back to the farm is not a job for an educated person. . . . Parents expect their children to acquire paid employment and to offer them support in their old age. They would consider the money invested in education as a loss if this proved not be the case. . . . Parents want their children to move into what they see as the modern sector of society.<sup>15</sup>

The background of such parental aspirations about the education of their children would help to explain why parents would not strongly support manual work in schools, especially at the secondary level where the aforementioned parental aspirations are more sharpened due to very limited accessibility. Further comments will be given in chapters six and seven on this aspect.

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<sup>15</sup>George Psychas, "Schools for Self-Reliance: Two Tanzanian Secondary Models" (Ed. D. dissertation, University of Massachusetts, 1982), pp. 176-78.

## The Corollary Hypotheses

Productive Labor in School Curriculum as a Progressive Step in Educational Development. For a further understanding of the problem under study, five supplementary research hypotheses or questions were investigated. The first was concerned with the general opinion in the school communities in question as to whether the policy of including manual work in the curriculum was considered a progressive step or not in Tanzanian educational development. In order to test this hypothesis, the statement, "The inclusion of manual work in the school curriculum is a progressive step," was presented to the respondents. They were asked to express on paper their degree of agreement or disagreement. The results are given in the following table (see Table 22.

TABLE 22

### POSITION IN SCHOOL BY MANUAL WORK INCLUSION EQUALS PROGRESSIVE STEP (PIS X MWAPS)

	1		2		3		4		5		Total	
PIS	No	%	No	%	No	%	No	%	No	%	No	%
1	2	40	2	40	1	20	-	-	-	-	5	1.3
2	27	28.1	53	55.2	10	10.4	5	5.2	1	1.0	96	24.7
3	158	54.9	96	33.3	16	5.6	9	3.1	9	3.1	288	74.0
Total	187	48.1	151	38.8	27	6.9	14	3.6	10	2.6	389	100.0

Chi-square = 25.74    D.F. = 8    Significance = 0.0012



The table shows that, of the five principals, who expressed their opinions, two agreed strongly, two just agreed and one was undecided. Of the ninety-six teacher respondents 28.1 percent of them strongly agreed and 1.0 strongly disagreed. In the case of students, 54.9 percent agreed strongly, and 3.1 percent strongly disagreed. Taking the school type as independent variable, (see Appendix L, Table 31) the percentages for strong support range from 57.4 percent to 38.5. The greatest support of the policy comes from the school which had a better run program of productive labor and lowest support of the policy comes from A-level boys' school noted for critical avant-gardism. The highest percentage (8.6 percent) of those strongly disagreeing with the statement comes from the school with a poorly run program of self-reliance activities. All in all, the statement was strongly supported by 48.1 percent and was strongly opposed by 2.6 percent of all the responses. The statistical message one reads from the results is that the support of the hypothesis is just mediocre and one needs to probe into what may be the explanation of this situation. Hopefully, the qualitative data will throw more light on this.

Impact of Productive Labor in Schools on Academic Performance. The second supplementary but crucial hypothesis to be investigated in this study was that the policy of inclusion of manual work in the school curriculum has a positive impact or enhances academic performance. The importance of this aspect of the study can be understood in the context of an alarming

statement by Cooksey as he says:

Inspectors' reports, discussions in Parliament, examination results, academic research and anecdotal evidence all point towards a drastic decline in the cognitive achievement levels of secondary students in Tanzania in the last decade or so.<sup>16</sup>

Is the inclusion of productive labor in the curriculum a contributory factor to this situation? The purpose of the research hypothesis mentioned above was to obtain the opinion of the school communities under investigation regarding this important question. In order to test the hypothesis, the respondents were asked to choose one of the three given statements, namely, that self-reliance activities (1) enhance, (2) undermine or (3) have a neutral effect on academic performance. The results are as follows.

Taking type of school as an independent variable the results are statistically significant at 0.0015 level (see Appendix L, Table 28). The percentage of those supporting the statement that productive labor enhances academic performance range from 59.0 percent to 43.1 percent. School numbered 2, with well organized productive labor program, had the highest (59 percent) percentage supporting the statement that academic performance is enhanced by self-reliance activities. It had also a low percentage, i.e. 8.2 percent of those perceiving an undermining effect of productive labor on academics. The lowest percentage of those in support of academics being enhanced by manual work courses from school

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<sup>16</sup>Cooksey, "Policy and Practice in Tanzanian Secondary Education since 1967," p. 186.

numbered 6, which has already been noted for its critical avant-gardism. The highest support of the statement that self-reliance undermines academic performance comes from school numbered 4, (32.4 percent) noted for its bad state of productive activities program. The girls' A-level school, numbered 3 had a high 52.2 percent supporting the statement that academics are enhanced by manual work activities. It is interesting to note that the percentages of those who think that the policy has a neutral effect on academics is fairly high, ranging from 40 to 23 percent. This would seem to recall Maliyamkono's finding in 1975 that there exists no positive relationship between highest yield in school and highest academic performance and vice-versa.<sup>17</sup>

The results on the same hypothesis, taking position of respondents in school as independent variable, are provided in the following table for further comparison (see Table 23).

TABLE 23

POSITION IN SCHOOL BY IMPACT OF POLICY  
ON ACADEMIC PERFORMANCE  
(PIS X IACP)

	1		2		3		Total	
PIS	No	%	No	%	No	%	No	%
1	2	40	1	20	2	40	5	1.3
2	27	28.1	13	13.5	56	58.3	96	24.9
3	165	57.9	50	17.5	70	24.6	285	73.8
Total	194	50.3	64	16.6	128	33.2	386	100.0

Chi-square = 38.27    D.F. = 4    Significance = 0.0000

<sup>17</sup>Maliyamkono, The Unproductive School, p. 46.

These results show that two of the five principals support "enhance" and two support "neutral" while only one is for "undermine." The contrast between teachers' and students' responses regarding "enhance" could be due to the possible confusion among students regarding the intended and the actual impact of the policy on academic performance. Now and again it has been inculcated in the minds of students that one of the rationales behind the introduction of productive activities in school is to enhance academic performance.<sup>18</sup> In responding to the questionnaire one could easily mistake this ideal for a fact. On the other hand, the highest percentage of teachers (58.3 percent) indicating "that the policy has a neutral effect could be influenced by the earlier noted Maliyamkono's research finding. The overall results show clearly the strength of the three opinions in the school communities, namely, the policy as enhancing academic performance coming first with 50.3 percent, then the "neutral effect" opinion with 33.2 percent and lastly the "undermining effect opinion" with 16.6 percent. Regarding the hypothesis under investigation, the results (50.3 percent) provide only a mediocre support. Qualitative data and discussion in the next chapter will throw more light on why the hypothesis does not seem to enjoy an overwhelming support.

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<sup>18</sup>Donatus Albert Komba, "Integration of Education and Work in Tanzania: a Clarification of the Policy Rationale and an Exploration of its Implication for Implementation and Evaluation" (Ph. D. dissertation, Columbia University, 1980), pp. 147-151.

The Preferred Model of Secondary School: The Academic or Integrated Model. The third subsidiary concern of the study was to check whether the "integrated curriculum," i. e., education and work was a conscious choice of the school communities. Since initially the policy had been introduced in schools as a top-down reform, it is imperative to find out whether with time and persuasion, the choice for an integrated curriculum is already an internalized concept in the school communities. Participation in and success of such a reform depends very much on the internalization of its choice. In order to get information about this question, the following question was proposed to the respondents: Given a choice, which secondary model would you prefer, secondary school with manual work as an integral part of the curriculum, or secondary school model with prime emphasis on academics?

The results on the above question according to school type are significant at 0.0049 level and are found in appendix L, Table 29. In school numbered 1, out of fifty-seven responses, 68.4 percent chose the integrated curriculum and 31.6 percent, for the academic model. In school numbered 2, responses were 83.3 percent for integrated and 16.7 percent for the academic curriculum. In school numbered 3, the percentage of respondents who were in favor of an integrated model was 73.5 and 26.5 percent were for an academic curriculum. In school numbered 4, 52 percent were for an integrated curriculum and 47.8 percent for an academic curriculum. The reader may remember that in this school

the self-reliance activities are not well-organized. In school numbered 5, 65 percent were for integrated and 34.8 percent for academic curriculum. Finally, in school numbered 6, known for the critical attitudes among students, 60.3 percent were for integrated and 39.7 percent for academic curriculum. On the average for all schools, 66.8 percent opted for the integrated curriculum and 33.2 percent for the academic curriculum. These statistics seem to indicate that the choice of an integrated curriculum has been sufficiently internalized. They seem also to suggest that the majority in the school communities do not like to return to the traditional academic curriculum. Psychas, makes a similar comment regarding attitudes of parents and school leavers towards an integrated curriculum.

But, perhaps because of the influence of the policy of Education for Self-Reliance, most parents appear to be dissatisfied with the strictly academic curriculum. . . . School leavers and parents are beginning to appreciate changing conditions in labor market and now recognize the value of vocational subjects in the curriculum.<sup>19</sup>

Do these results contradict the results on the inclusion of manual work in the curriculum, which was strongly supported by 48.1 percent? This does not seem so. The latter hypothesis seems to refer to the philosophy or rationale of an integrated curriculum which seems to be approved, and the former hypothesis refer to respondents' reaction to the practical realization of the ideal as concretized by specific manual work practices in schools. Hence, the comparison of both results signal to the

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<sup>19</sup>Psychas, "Schools for Self-Reliance," pp. 177-78.

reader the problems which might have cropped up in the implementation of the fairly well accepted ideal. The next two chapters will be more enlightening with regard to this aspect.

#### Self-Reliance Activities and Chances to Higher Education.

The fourth subsidiary hypothesis is concerned with the school communities' perception regarding the relationship between students' participation in productive activities and their chances for higher education. In spite of the official stand that secondary education should be terminal, students' aspirations for higher education are very high. The perception of the nexus between self-reliance activities and higher education is crucial to the implementation of the policy. Moreover, ideologically, the Musoma Resolution (1974) had strongly emphasized the connection between practical labor and promotion to higher education.

The excessive emphasis placed on written examinations must be reduced and students must be continually assessed on the basis of their progress in the classroom combined with their performance of other functions and the work component of their studies. . . . Students completing Form Six of secondary education will have to work and gain practical experience for a number of years before they will be considered to pursue university studies.<sup>20</sup>

Do the school communities under study share this perception? In order to get information regarding this research question, respondents were asked to indicate their degree of agreement or disagreement with the statement that: Students regard participation in self-reliance activities as important to their chances for higher education.

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<sup>20</sup>Yusuf O. Kassam, The Adult Education Revolution in Tanzania (Nairobi: Shungwaya Publishers Ltd, 1978), pp. 102-103.

Taking position of respondents in schools as an independent variable, the results provided in Table 24 are significant at 0.0002.

TABLE 24

POSITION IN SCHOOL BY SELF-RELIANCE AND  
HIGHER EDUCATION  
(PIS X SRHE)

	1		2		3		4		5		Total	
PIS	No	%	No	%	No	%	No	%	No	%	No	%
1	-	-	-	-	1	20	3	60	1	20	5	1.3
2	4	4.1	14	14.4	10	10.3	38	39.2	31	32	97	25.3
3	54	19.2	46	16.4	59	21.0	66	23.5	56	19.9	281	73.4
Total	58	15.1	60	15.7	70	18.3	107	27.9	88	23.0	383	100.0

Chi-square = 29.87    D. F. = 8    Significance = 0.0002

The results on the table show that of the five principals that responded to this item, none of them agreed with the statement, one was undecided, three disagreed and one disagreed strongly. The teachers' response indicate a percentage of 4.1 who agreed strongly in contrast to 32 percent who disagreed strongly with the statement. As for students, 19.2 percent agreed strongly and 19.9 percent disagreed strongly. Again the difference between the teachers' and students' percentages are understandable taking into account the fact that teachers are in a better position to assess the situation. On the whole, 30.8 percent agreed and 50.9 percent disagreed with the statement. The statistical message one infers from the above results is that the



practical perception in the school communities studied is that "self-reliance activities," in spite of the official stance, do not significantly impinge on the chances for higher education. The responses of teachers confirm the existence of some "opposition culture" among teachers who continue to hold that students' promotion to higher education should be based on academic performance, and that the professional role of a teacher is to make sure that his or her students perform well academically. Similarly, the students' responses confirm the findings of Mbilinyi (1984), Kerner (1984) and Almasi (1985), that students respect academic subjects more than "self-reliance activities" because of their practical realization that their future depends on their academic success.<sup>21</sup>

#### Self-Reliance Activities and Methods of their Assessment.

The last but not least of the research hypothesis to be tested is concerned with the methods used to assess "self-reliance activities". Since 1976, a new system of assessing students' educational achievement was established. It combines a continuum of classroom assessment, written examinations and attitudes towards work. This hypothesis deals specifically with methods used to assess attitudes towards work through productive labor. Are they perceived as fair or not? It is the opinion of the investigator that this issue is crucial for students' commitment to "productive activities." If they perceive that the methods used are fair,

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<sup>21</sup>Almasi, "Implementation of Education for Self-Reliance," p. 86.

they will be motivated to participate, otherwise they will be discouraged or adopt all sorts of tactics to beat the system.

This hypothesis has two parts. The first part looks at how the schools' assessment is perceived. In order to gather information about this, respondents were asked to indicate "very fair," "somewhat fair," or "not at all fair" in response to the question: How fair is your school's method of assessing students' participation in self-reliance activities? The results which are statistically significant at 0.0000 level are shown in Table 25.

TABLE 25

POSITION IN SCHOOL BY SCHOOL'S METHOD OF ASSESSMENT  
(PIS X MASS)

	1		2		3		Total	
PIS	No	%	No	%	No	%	No	%
1	2	40	2	40	1	20	5	1.3
2	20	21.1	52	54.7	23	24.2	95	24.7
3	196	69	52	18.3	36	12.7	284	74
Total	218	56.8	106	27.6	60	15.6	384	100.0

Chi=quare = 69.72    D. F. = 4    Significance = 0.0000

Two principals indicated that the methods were very fair, two marked "somewhat fair" and one said they were "not fair at all." 21.4 percent of teachers indicated that methods were very fair and 24.4 percent chose the response "not fair at all." Since teachers are more conversant with the details of the assessment process than students, their opinion is a very important one. As for students, 69 percent said assessment is very fair and 12.7

indicated it is "not fair at all." Students' responses seem to be more favorable to the hypothesis and this is not surprising as they know less about the mechanics of the assessment process. The overall 56.8 percent support of the hypothesis should be modified because of the inflation of the percentage by students. On the whole, the statistical message about the hypothesis is that schools' methods of assessment are perceived as "somewhat" fair. This suggests that more could still be done in order to improve the fairness of these methods. Qualitative findings will explore some of the weaknesses inherent in these methods.

The second part of the hypothesis looked at the fairness of the National Examination System regarding the assessment of self-reliance activities and its inclusion in the final results of students' achievement. In order to get the opinion of the school communities under study about this issue, an incomplete statement was presented to the respondents: "The National Examination Council's system of evaluating students' participation in self-reliance activities is \_\_\_\_." The respondents were asked to complete the statement with "very fair," or "somewhat fair," or "not at all fair." The results are presented in Table 26.

As shown in the table, of the five principals, one, indicated that the system was very fair and the other four said it was just fair. Teachers on the other hand, expressed fairly strong criticism of the system; 19.1 percent said it was very fair and 31.9 percent that it was not fair at all. Their opinion carries much weight because teachers are routinely involved in

filling out forms which are used by the Council in making its final assessment and integrating this with other aspects of a student's educational achievement. The students responses were comparatively more favorable to the hypothesis, with 63.9 percent indicating "very fair" and 12.9 percent, "not fair at all." On the whole, the hypothesis was supported by 52.2 percent and opposed by 17.4 percent. This result seem to suggest that the hypothesis seems to rest on mediocre support. The weakness of the findings is that neither teachers, although they are better informed, nor students have the inside knowledge of the functioning of the Examination Council. However, it is crucial to be aware of their opinion because it affects their commitment to the aims of the policy.

TABLE 26

POSITION IN SCHOOL BY NATIONAL EXAMS COUNCIL'S  
METHOD OF ASSESSMENT  
(PIS X ESY)

	1		2		3		Total	
PIS	No	%	No	%	No	%	No	%
1	1	20	4	80.0	-	-	5	1.3
2	18	19.1	46	48.9	30	31.9	94	24.8
3	179	63.9	65	23.2	36	12.9	280	73.9
Total	198	52.2	115	30.3	66	17.4	397	100.0

Chi-square = 63.04    D.F. = 4    Significance = 0.0000

Some research findings are already pointing out some of the criticisms of the system. For example, Almasi reports that the students' participation in productive labor has become merely examination oriented, in that "students participated in self-reliance activities in order to get good reports at the end of the year." Almasi also quotes Vulliamy's and Sander's study of 1983 which reveals that teachers are afraid to downgrade [to give a fair assessment] their students in self-reliance activities as this would affect the overall performance of the school. Also some unfairness in the system is alluded to by the same author quoting Mukyanuzi's study of 1978, which reported that "recent studies had shown that student assessment of participation in self-reliance activities were being used to discriminate against sex and socio-economic status."<sup>22</sup>

The above findings by other researchers corroborates the statistical message of this study that the hypothesis regarding the fairness of the system of assessing self-reliance activities is poorly supported. More clarification of this point will be provided by qualitative data in Chapter six.

This chapter presented statistical results of the opinions in the school communities under study regarding a variety of key issues related to the inclusion of manual work in the secondary school curriculum. From the results is clear that the choice of an education-work integrated model over the traditional academic model of secondary school curriculum seems to have been

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<sup>22</sup>Ibid., pp 88, 83.

sufficiently internalized by students, teachers and parents. However, the results seem to signal a crisis in the implementation of the policy of productive labor in schools. None of the hypotheses that were postulated, in view of a good implementation process was significantly supported by the results. They all seem to rest on precarious ground, suggesting that the problem does not lie with the acceptance of the philosophy behind the policy but with its practical implementation. Thus the results suggest that the period of romanticizing the idea of productive labor in schools is over; what is needed now is a critical evaluation of the implementation process and the courage to do "surgery" where required. To avoid unnecessary repetition, a summary of synthesized results on the various hypothesis will be presented after the presentation of qualitative findings. The following chapter therefore will deal with such qualitative findings which will complement and supplement what has been presented in this chapter.

## CHAPTER VI

### A PRESENTATION OF QUALITATIVE FINDINGS OF THE STUDY

This chapter is an attempt to summarize what the researcher observed, heard and found in various records regarding the implementation of the policy of inclusion of manual work in the secondary school curriculum. The data is organized in three major groups. First is data relating to aims of the policy as understood and implemented. The second group deals with data referring to the evidence available of support or lack of support of the policy. The third is data relating to some relevant key issues regarding the policy. Brief discussion will be integrated into this presentation in order to show how qualitative findings relate to the quantitative findings of this study and the evidence available from other related research reports.

#### Aims of the Policy

The concern of the study under this aspect was two-fold. In the first place it was important to find out if all the aims of "productive labor" in schools, as officially set out, are clearly understood or not. Secondly, it was imperative to look for observable evidence that can be reported regarding the implementation of each of the aims. To recapitulate what was mentioned earlier in Chapters I and II, there are five aims of sr-activi-

ties in schools. First, the economic aim is to make schools contribute to the cost of education. Specifically, since 1 July 1975, it was directed by the Ministry of Education that secondary schools and colleges should contribute 25 percent of the catering expenses. Secondly, the politico-ideological aim is that Tanzania has chosen a socialist path of development, hence, it is essential that education inculcate values that are compatible with a socialist system. More specifically, the values of cooperation and a positive attitude towards manual work are considered crucial and it is the aim of sr-activities to foster these values. Thirdly, the technical aim is that these activities should impart knowledge and skills required for rural and urban development. Fourthly, the pedagogical aim is that these activities should help to merge theory and practice, to relate what is taught in the classroom to what is done during manual work activities. Lastly, but not least, the community rationale of sr-activities is that these activities should help the integration of school and community. What follows then, is what was found out regarding these aims.

Understanding of the Aims. The investigator was interested in the practical rather than theoretical understanding of the aims of sr-activities. Casual talks with respondents had some revelations on this. When discussing the importance of these activities in schools, it was quite noticeable that most respondents mentioned practically only two aims, namely, the acquisition of useful skills for being self-reliant after leaving



school, and the alleviation of the education cost. Very few mentioned the politico-ideological aim. With the exception of a few teachers, no mention was made of both the educational and community rationales. When discussing about the success or failure of the policy, respondents dwelt almost exclusively with the economic aspect of "productive labor." Little mention was made of the technical aspect, while other aspects were practically passed over in silence, unless prompted by the investigator for comments on them. Similarly, an inspection by this investigator of school records on sr-activities, that is, Minutes of Self-Reliance Committee Meetings and Annual Reports, revealed that only economic aspects of sr-activities were being referred to. As revealed in the Minutes, self-reliance meetings were planned for more production, discussion of problems standing in the way of achieving this and laying out details of how best to use whatever is produced. One would have expected to find discussions on how the other aims were being achieved, but this is not found in these reports. Besides lack of attention to some of the aims of the policy in the implementation, it was observed in the schools under study that there was a tendency to identify "manual work activities" with just "agricultural activities," as one teacher (R #14) complained.

Since the inclusion of manual work in the curriculum has been introduced, there is a misinterpretation of the policy by some leaders. They think that the only manual work or self-reliance activity is shamba [farm] activity. As a result, they spend much of their time in assessing just

shamba work in order to assess the success of the policy.<sup>1</sup>

Similarly, a student (R #308) had this complaint:

In my school, during the period marked on the time-table as sr-activities, nothing is done but agricultural activity. I wish it to be understood that manual work includes a variety of activities.<sup>2</sup>

The above indicators show that the aims of sr-activities are not practically understood, although theoretically, they may be. Also there is a limited understanding of the scope "manual activities." Moreover, there seems to be confusion regarding priority ranking of the aims of sr-activities and the distinction between these aims and those of "diversification program" and ESR in general.

These findings confirm the quantitative findings in the preceeding chapter that showed that only 37 percent of teachers and 30.8 percent of students who responded to the questionnaire had a comprehensive understanding of the aims of sr-activities in schools. The two methods used in this investigation show different results as to the most emphasized goal in the schools.

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<sup>1</sup>In the presentation of findings R#'s refer to respondents of the qualitative questions on the questionnaire that was administered in six schools in Kagera between 3 March and 26 April 1986.

I#'s refer to the interviewees in the study. These interviews were conducted in Kagera, Dar es salaam and Coast Regions during the months of January to June inclusively. For the sake of confidentiality, the researcher uses numbers rather than names and keeps names of interviewees and schools anonymous.

This quotation refers to a teacher's response to the open question part of the questionnaire administered at a school in Bukoba, 15 April 1986.

<sup>2</sup>This is a student's response to the questionnaire administered at a school in Kagera, 13 March 1986.

qualitative observation does show that it is the economic aim that dominates productive activities. Quantitative data, on the other hand, shows that only 2.6 percent of all respondents checked the economic aim whereas 48.6 percent checked the technical aim. These results, however, are not in opposition but complement each other. The qualitative finding highlights what praxis shows as the most emphasized goal and the quantitative finding is indicative of the wishful thinking of school communities regarding what they would like to be emphasized most in sr-activities, namely, teaching skills conducive to self-reliance in life, especially after school.

Since human beings in their human acts are usually guided by a clear vision of aims, the above finding regarding inadequate understanding and misunderstanding or misinterpretation of the aims of sr-activities is a bad omen. When the aims are not clear in the minds of the implementors, the implementation is bound to be a dubious one. This situation was already observed by Lema in a similar study in 1972:

Many of the negative attitudes revealed during the interviews are caused by misconceptions about the true meaning of education for self-reliance. Some teachers, for example, did not fully understand the implications of the new policy, nor were they sufficiently sure how to interpret its significance to their pupils.<sup>3</sup>

What is striking about this study is that the above situation described by Lema has not changed much after fourteen years. What are the implications of this? Suggestive answers to this question

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<sup>3</sup>Lema, Education for Self-Reliance: A Brief Survey, p. 40.

will be given in Chapter VII.

Economic Contribution of Self-Reliance Activities. The six schools where observation took place had a variety of projects which have already been mentioned in Chapter IV. One of the aspects that interested the researcher was to examine whether these projects were a worthwhile economic exercise or merely a cosmetic show-off of the integration of work and education. The major agricultural projects included coffee, banana, tea plantations and tomato gardens. Since this region is well known for banana and coffee growing, one would have expected schools to perform well as far as these two items are concerned. The reality observed did not confirm the expectation. With the exception of one urban school, none of the schools had coffee plantations that could be described as economically impressive. These plantations, due to inadequate weeding and pruning were conspicuously below the average of well kept plantations of peasants around or nearby. As for banana plantations, the investigator was impressed by only one plantation which was clean and well-trimmed. The researcher, curious to know why this was in contrast with the others, was told that the weeding is done by students but the delicate job of trimming and tendering the banana trees was done by a paid worker from the neighboring village. It was the impression of the observer regarding three other banana plantations that they were sore spots in the eyes of the peasants around whose cultured pride is to have a well-kept and clean plantation. In one plantation, the rumbugu (couch-grass) had

become uncontrollable; in another, the weeding and trimming was not well managed partly due to the size of the plantation and the discouraging incursions of thieves and in the third, the environment -- the land is water-logged -- was not ideal for production. Moreover, schools did not seem to be well prepared against the natural enemies of banana plants -- the nematodes or banana weevils. There was a shortage of Furadan insecticide and students were not prepared in the skill of field-sanitation, that is, the careful uprooting and cleaning of stocks. Of the six schools under study, two had tea plantations which were virtually neglected. Most of the blame was being directed to the Tea Authority which had failed to organize efficiently the transportation and buying of the harvest and consequently had discouraged production. However, an encouraging sight was provided by the tomato gardens found in three schools which commented favorably on the economic contribution of these projects.

The major livestock projects included cattle-keeping, piggery and poultry raising. Cattle-keeping is traditionally considered in this region as a prestigious occupation. It is interesting to see the general enthusiasm with which these projects have been received in the schools. Even the urban and girls' secondary schools had such projects. The researcher was impressed by the enthusiasm with which the girls performed the chores or duties, such as stable-cleaning, fetching grass and cow-milking -- all involving dairy projects. There were two types

of cattle-keeping: the pasture-grazing of local-bred cattle--the short-horned Zebu and the indoor or zero-grazing of the exotic or crossed-bred Boran and Friezian cattle for milk production. Whereas the latter project seemed manageable and economically viable, the former was beset by problems of organizing committed grazing and of contracting tick-bone disease from common pasture. Also the economic contribution of this project was dubious.

Four of the six schools had piggery projects, whose maintenance was certainly below average. The main explanation that was given is the problem of food. These projects depended on the left-overs of human food and since in these schools there was just enough for students, pigs suffered greatly from under-nourishment. In two cases, the researcher was moved to pity seeing the condition in which the pigs were being kept and wondered why these projects could not be phased out immediately. With the exception of the urban schools, all the schools at one time or another had tried to have poultry projects. The poultry houses, however, were all empty as the projects had been phased out due to poor supply of chicken feed in the region. This is tragic because such projects in schools (e.g., Kibaha and Ruvu) situated in regions with good supply of chicken feed, contribute a lot economically.<sup>4</sup>

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<sup>4</sup>From individual school records examined, data show that in 1984, Kibaha Secondary School made a profit of 208,805.50 Tanzanian Shillings from a Layers-chicken project. In 1985, Ruvu Secondary School made a profit of 104,711.00 Shillings from a Layers-chicken project and 88,607.00 Shillings from a Broiler-

Besides agricultural and livestock projects, one needs to mention two popular commercial projects, namely, canteens and shops. Five of the six schools had canteens whose operational capacity was very low due to the scarcity of essential articles such as sugar, softdrinks and baking materials. All schools had a shop (sales) of some sort. The ideal of having a school shop totally run by students was being abandoned for cooperative shops which were partly owned by the school and partly by staff members who could buy shares in these shops. This deviation from the original ideal was forced on schools because the local suppliers had more respect for cooperative shops than for student-run shops. All the shops in these schools were operating under heavy constraints of shortage of materials and wastage of both students and teachers' time of going back and forth to coax suppliers for the scarce items. Although these shops are a great service to the school community, one has grounds to doubt if students' time invested in this venture is economically, let alone educationally, justifiable or worthwhile.

In general, from the above description, the picture of the economic contribution of sr-projects that emerges is not a roseate one. In the observer's opinion, only dairy-cattle and tomato-garden projects were making a significant economic contribution. The contribution of other projects was dubious if one takes into account the time -- ten hours per week which are supposed to be spent on productive labor. One should not be

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chicken project.

misled by figures of profits which are reported to the Ministry of Education without taking into account the man-hours spent and area or size of the projects. Even then, the calculations based on figures obtained in the schools under study (see Chapter IV) show that economic contributions of sr-activities in these schools are still very low, varying from 1.09 to 5.3 percent as compared to the national target of meeting 25 percent of the catering expenses. One teacher-coordinator of these projects, answering a question in this regard, used an expression that tells it all -- "Tunatangatanga tu," [We are simply wandering about.]<sup>5</sup> One reads into this statement that there is lack of rigorous assessment of the economic justifiability of many of the projects. Projects continue to exist in schools provided something is being produced without taking into consideration the commensurability of efforts (time, manpower, size and capital investment) and the profits. This superficiality in assessing the economic contribution of projects seems to be reflected in the quantitative finding which showed that only 48.7 percent of 382 respondents were of the opinion that sr-projects were making a significant economic contribution. Cognizant of the fact that the situation changes from region to region and from school to school, the finding of this study confirms the findings of Nkonoki (1977) and Maliyamkono (1978) regarding the low and dubious economic contribution of sr-projects. A discussion of the

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<sup>5</sup>Interview with a teacher at a secondary in Bukoba, 2 April 1986.



possible causes and implications of this finding will be presented in Chapter VII.

#### Attitudes of Cooperation and Appreciation of Manual Work.

One of the emphasized aims of sr-activities by policy makers is the politico-ideological one. These activities are supposed to foster a socialist-ethic of work, namely, appreciating manual work as a source of life and human dignity and developing a cooperative spirit in doing work. The researcher was interested in watching students' behavior at work and the work organization itself for any indication of whether the desired goal was being achieved. For this purpose, in each school observed, the researcher spent four sessions with students while at work. Careful observation was made for indicators that would show appreciation of manual work such as: students' enthusiasm; dress-code; punctuality; a sense of "a job well done;" and student-talk about the policy. In general, students spoke favorably of manual work projects. It was amazing how good they were at giving right answers. Talking alone, however, does not signify much unless it is backed by actions. It was noticed that students were comfortable in their work clothes and were not showing significant reluctance to engage in dirty, manual work activities. The enthusiasm however, was generally low. Unless seriously supervised, students arrived late and left before the assigned time. In one instance, the manual work session was supposed to be from 3:30 p.m. to 5:30 p.m., but students begun arriving at 4:00 p.m. and were already dropping out at 5:00 p.m.

What was most discouraging was an obvious lack of a sense of "a job well done" in most of the students. The effort to apply oneself to do well at what one is supposed to do was in most cases absent. It was a matter of passing time and no uneasiness was demonstrated regarding the poor state of some of the projects. Watching this situation, the researcher came to the conclusion that though students may have realized theoretically the importance and dignity of manual work, the corresponding habitual responses have not yet been formed. As for the cooperative spirit, there was some organizational contradiction. Whereas most manual work activities were done in groups, the assessment of students' application in sr-activities was in most cases, except in one of the schools, based in individual portions (e.g., a row of tomato plots for each student). As a result, students tended to work harder on individual portions and manifested kutegeana (nobody's business syndrome) during the cooperative activities. This certainly runs counter to the intended goal of developing a cooperative work spirit.

The above finding regarding the socialist work-ethic among students agrees with the quantitative finding of this study. In response to the questionnaire regarding this question, only 37.5 percent of the respondents strongly supported the statement that sr-activities were helping the acquisition of the said attitudes. Certainly an important step has been made in the right direction, judging from the students' political awareness, but there is still a long way to go in order to speak of clearly visible,

practical, positive attitudes towards manual work among students. The resilience of negative "die-hard" attitudes toward manual work has been referred to by other researchers such as Lema (1972), Nkonoki (1977), Lema, et al. (1977), Mbilinyi (1979) and Almasi (1985). The suggested causes and implications of this situation will be the subject of Chapter VII.

Knowledge and Skills for Rural and Urban Development. The technical aim of sr-activities is to equip students with skills vital for rural and urban development. This was emphasized by Nyerere in his talk on "Education for Liberation" in 1974, when he said that "attitudinal change is not enough for the liberation of the masses; knowledge and skills are also necessary to take control of society."<sup>6</sup> The great danger in sr-activities is the possibility of emphasizing production or material output over the acquisition of skills. The researcher therefore was interested in his observation to see if there were any visible signs that these activities were helping students to acquire better skills for production. Thus students were expected to show skillfulness in their work. The researcher observed that it was in the dairy-cattle and tomato-gardening projects where it was clear that students were acquiring modern skills of production. In the other projects it seemed that emphasis was on mere production and reproduction of skills even lower than those of ordinary peasant farmers. As mentioned earlier, except for vegetable gardens,

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<sup>6</sup>Quoted by Marjorie Mbilinyi in Andrew Coulson, ed., African Socialism in Practice: The Tanzanian Experience (Spokesman: 1979), p. 218.

dairy-cow projects and one banana plantation maintained with the skill of a village worker, many of the projects were not demonstrable pieces of good work as expected of learning institutions. The problem of tools observed by Nkonoki (1977) and Maliyamkono (1978) is still there. The technological level of tools in these schools is very low and there is a great shortage of them. None of the schools had a tractor, draft animal, ox-plough or any other strikingly modern tool. Fertilizers were in very short supply.

The above lack of a thrust for the acquisition of a high level of technical skills in sr-activities was referred to often in the interviews with students and teachers. One student R #365 gave the following suggestion:

It is necessary that in sr-activities students learn to use modern tools of production so that later on when they join the rest of the work force they may be able to teach new skills to those who do not have the same opportunity.<sup>7</sup>

A similar suggestion was expressed in stronger terms by a teacher (R #5):

Manual work activities should be totally scientific and should be for the purpose of training rather than economical.<sup>8</sup>

This finding of the study confirms what other researchers have earlier pointed out (Nkonoki, 1977, Mbilinyi, 1980, and Cooksey,

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<sup>7</sup>Abridged from the Kiswahili text of a student's response to the questionnaire administered at a school in Kagera on 6 March 1986: "Inabidi wanafunzi katika shughuli za miradi wajifunze mbinu za kisasa ili watakapoanza shughuli za kuzalisha mali waweze kutoa mwanga kwa wale ambao hawakujifunza mbinu za kisasa."

<sup>8</sup>This is a teacher's response to a questionnaire administered at a secondary school in Kagera on 15 April 1986.

1986). Ruth M. Besha made the following observation in 1973:

In most cases, self-reliance activities are undertaken mechanically! There is little attempt to teach the pupils the 'skills' (even very elementary) required in carrying them out.<sup>9</sup>

In the schools that were observed, the above situation had not changed by 1986. Also the opinion survey conducted by the investigator regarding this aspect in the schools under study did not show an optimistic picture. Of the 382 responses only 149 (39 percent) strongly supported the opinion that sr-activities were promoting the acquisition of modern skills required for rural development. Worse still, of the 384 responses, only 75 (19.5 percent) strongly agreed that sr-activities were an effective means of imparting skills required for urban development. The researcher would even question the latter percentage since in the schools that were observed there were hardly any manual work projects designed to promote urban skills, except casual involvement in plumbing and repairing of electrical equipments. In short, the finding of this study was that no serious steps have been taken to ensure that the aims of imparting better knowledge and skills by means of sr-activities become a practical reality. In Chapter VII implications of this finding will be discussed.

Merging Theory and Practice or Application of What is Learned in the Classroom to Self-Reliance Activities. Distinct from the technical aim is the educational or pedagogical aim of

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<sup>9</sup>Quoted by Donatus A. Komba in "The Integration of Education and Work in Tanzania," p. 30.

sr-activities. These activities are supposed to help the learner by providing an opportunity or moment of direct application of what is learned in the classroom to real life situations. They are also supposed to develop in the learner a problem-solving attitude as he or she responds to what is new and problematic in concrete work situations.<sup>10</sup> It was one of the objectives of this study to find whether or not this was significantly taking place.

Out of the twenty-four sessions of observing students at work, the researcher witnessed explicit application of what is learned in the classroom only in two instances. One such instance was when the teacher, suspicious that one of the cows was getting sick, referred the students in charge of the project to what they had discussed in the class regarding symptoms of various cattle diseases. In another instance, a student explained to the researcher scientifically the possible causes of why a portion of the tomato garden was not growing well. During the twenty-four classroom periods attended, the researcher did not notice much effort being made to refer classroom experience to the experience in the sr-activities. One exception, was an interesting case whereby a teacher used students' work experience to explain soil chemistry. During a conversation, one of the teachers complained that little attention was being paid to the educational aim of sr-activities and to guiding students to have confidence in the possibility of mastering the environment for better production.

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<sup>10</sup>See Komba, "The Integration of Education and Work in Tanzania", p. 136.

In informal conversations with students, it was obvious that the distinction between the technical and pedagogical aims of sr-activities was not clear to them. The majority were of the persuasion that the imparting of skills was the chief purpose of sr-activities. It is no wonder that in response to the questionnaires regarding aims of sr-activities, out of 289 responses from students, 155 or 53.6 percent indicated the acquisition of skills, in contrast with twenty-seven students or 9.3 percent who indicated the application of what is learned in the classroom. Thus, it appears from what was observed that the pedagogical aim of sr-activities is not only misunderstood but very little is manifestly being done to achieve it.

The above finding was corroborated by evidence from the interviews. Two curriculum developers at the Institute of Education argued that the merging of theory and practice was not taking place as desired because the implementation of the policy was without the backing of curriculum theory. The teachers were simply told to implement the policy with neither prior preparation nor clear guidelines of how to approach the merging of theory and practice. As a result most of them, in spite of their good will to cooperate, do not know what to do and hence, are not to blame. In response to the qualitative question on the questionnaire, thirty-six respondents alluded to the lack of the educational approach in manual work projects. One teacher, R#262 made this suggestion:

Manual work activities should be well directed. Experts with the ability to teach should guide these activities. Each

step of implementing sr-activities should be explained to the students and the benefits to be derived from such activities should be clarified to them.<sup>11</sup>

One student (R #359) also made a similar recommendation:

I would prefer that structure of manual work activities be related to classroom work. For example students who have been learning about soap-making should be involved in manual activities of trying to make soap themselves.<sup>12</sup>

The implication of this suggestion is that sr-activities, in order to be useful educationally, should be well structured in the curriculum and not be random activities chosen without reference to the school academic syllabus. Another student (R #315) made a similar comment in strong terms when he said that, "students should learn through manual work projects. They should not simply be told 'to do the work'."<sup>13</sup> This latter comment by the student was repeated by a university lecturer I #1 who said that, "sr-activities have been reduced to 'going to do self-reliance.' Students are told to 'finish that area' without

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<sup>11</sup>Abridged from the Kiswahili text: "Kazi za mikono zielekezwe vizuri. Wataalam wenye uwezo wa kufundisha wawepo kuelekeza jinsi ya kufanya shughuli. Vijana wasiachiwe tu kuendesha kazi hizo bila kuelimishwa na kuelezwa faida." This is a teacher's response to the questionnaire administered at a school in Kagera, 13 March 1986.

<sup>12</sup>Abridged from the Kiswahili text: "Ningependelea zaidi kama mfumo wa kazi za mikono ungeambatana na masomo ya darasani. Mfano, wanafunzi waliokuwa wanafundishwa namna ya kutengeneza sabuni wafanye kwa vitendo kwa kujaribu kujitengenezea sabuni wenyewe." This is a student's response to the questionnaire, 6 March 1986.

<sup>13</sup>Abridged from the Kiswahili text: "Wanafunzi wapewe elimu katika kuzifanya kazi za mikono siyo waambiwe 'fanya tu'." Student's response to questionnaire, 13 March 1986.



linking theory and practice."<sup>14</sup> The consequence of this deficiency in the implementation of the policy is well spelled out by Nkonoki.

Low yields per acre in agricultural projects of many secondary schools is an indication that there is still little, if any merger of theory and practice in the 'life' and activities of the schools.<sup>15</sup>

In short, the investigation of this study did not reveal any significant efforts made to reconcile classroom learning with "self-reliance" projects. The implications of this will be further discussed in Chapter VII.

Self-Reliance Activities as Means of Integrating School and Community. Another important aim of "self-reliance projects," which is often overlooked, is the integration of school and the surrounding community. The rationale behind this aim is both ideological and utilitarian, namely, to facilitate the elimination of the "town-gown" or "village-gown" complex, and the cross-fertilization of better methods of production. In view of this, schools were expected to show evidence of some joint projects between school and community as far as academics were concerned. All schools had programs, more or less functional, of the schools' involvement in adult education campaign. In two of the boarding schools, opportunity was being provided for primary school leavers who had not been selected to continue in regular secondary schools, to attend classes as day scholars. One school

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<sup>14</sup>Interview with a Lecturer at the University of Dar es salaam, Tanzania, 30 May 1986.

<sup>15</sup>Nkonoki, "Education for Self-Reliance," p. 435.

had the program already underway and the other was in the process of finalizing the necessary arrangements.

As for sr-activities, with the exception of school-shop services to the neighboring community, there was little, if any, evidence of school community integration. There was no joint project purposely designed by both school and community. In one instance, the researcher found a villager employed by the school not to teach students how to look after a banana plantation, but just to look after the school's banana plantation as a paid job. In another instance, villagers were employed to help in cattle grazing while students were in classes. One interesting use of community expertise to teach students was being tried in one school where students worked together with a local mason on a building project. The responses from teachers and students regarding this aspect were usually on the negative side. There were complaints about thievery from villages, litigations over pasture and agricultural land ownership, and lack of enthusiasm and quick response to appeals for help by schools to local experts in either agricultural or livestock projects. Moreover, most of the school shops had to be abandoned for cooperative ones or were operating at a very low level because the local suppliers made it difficult for schools to obtain the essential items. The school administration now and then had consultation with the village elders; however, these were mainly concerning disciplinary matters rather than with sr-activities. It was obvious to the investigator that this area of sr-activities as a

means of integrating school and community has not yet been systematically tried out.

The finding of this study seems to agree with what other researchers have said about other schools in Tanzania. Kerner, for example, in her study of 1984 observed that, "overall, few self-reliance projects involve the surrounding community in a direct way."<sup>16</sup> Cooksey further clarifies this by stating that, "activities which involve local communities include the teaching of adult literacy classes, the production of goods for sale and running a school lorry."<sup>17</sup> Almasi also reported in 1984 the following finding in this regard.

. . . school/community integration tended to take place on an ad hoc basis and not through laid down policy statements.  
 . . . School teachers and students were no longer participating in literary classes. Further, schools in the sample did not operate projects in collaboration with village communities. There was also lack of representation by either side in each others' committees.<sup>18</sup>

In sum, from the evidence available, there seems to be no consistent or persistent effort exerted in most of the schools in Tanzania that have been studied, to integrate school and community through self-reliance activities. The implications of this finding will be addressed later in this study.

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<sup>16</sup>Quoted in Cooksey, "Policy and Practice in Tanzania Secondary Education" (1986), p. 192.

<sup>17</sup>Ibid.

<sup>18</sup>Almasi, "Implementation of Education for Self-Reliance" (1985), p. 27.

### support of Policy

The success of any policy in a democratic society depends mostly on the support or the degree of acceptance it has from those who are involved in its implementation. It was thus imperative for this study, besides looking at how the aims of the policy were being achieved, to investigate the support the policy was getting from teachers, students, parents and the politico-economy prevailing in Tanzania. The underlying question was: Is there significant evidence that there is genuine commitment for the success of the policy on the part of those involved in the implementation, or is it a mere implementation of a top-down reform? This section of the chapter deals with the findings of the study under the above aspect.

Attitudes of Teachers toward the Policy. Attitudes are per se invisible. However, by listening to comments and watching overt behavior, one can gain some insight regarding attitudes. In order to check on teachers' attitudes regarding the inclusion of productive labor in schools, the investigator observed the teachers' participation in "self-reliance projects," watched their efforts to integrate work and education in the classroom and paid attention to their comments both oral and written regarding the policy.

The time allocated for "self-reliance projects" in all the schools varied. Five schools had their "self-reliance projects in the afternoon varying from 3:00 to 5:50. In one school, however, "self-reliance periods" were integrated in the academic time

table starting in the morning from 7:50 to 1:30 in the afternoon. Two forty-minute periods were combined twice a week for productive activities and the students took turns by classes. In both types of organization, elaborate guidelines for teachers' participation in the projects were available from the administration files. However, observation at the place of work uncovered a different reality. In the former type of organization, the visibility of teachers during productive activities was conspicuously minimal. In one school, out of thirty-five teachers only three were seen at the project sites. In three other schools, no teachers were seen except coordinators of the projects. In most cases, the presence of teachers was more supervisory than educational. They were there either to assign areas or amount of work to be covered by each student or the class for the period or provide a threatening atmosphere so that work could be done. In one instance, a teacher who was standing by while students were working, had a rod in one hand. At one point he made this remark to the investigator. "If a teacher is not tough, students won't work."<sup>19</sup> In general, in the type of time table where "self-reliance periods" were relegated to the afternoon sessions, teachers were tempted to disappear after classes in order to take care of their own pressing needs. In the case of the school with an integrated timetable with self-reliance periods between classes, teachers could usually be seen

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<sup>19</sup>Remark made by a teacher during the researcher's field observation of self-reliance activities at a school in Kagera, Tanzania, 16 April 1986.

with their classes at work but in most cases the participation was of the quality described above.

The investigator also attempted to observe how efforts were being made by teachers to relate "self-reliance projects" with what was being taught in the classroom. As mentioned earlier, there was very little evidence of that happening. In most cases, classroom work was treated as a separate moment unrelated to the "productive projects." Two positions emerged from conversations with teachers. Those on the leadership side tended to blame teachers for lack of commitment. The teachers on the other hand complained of overloaded syllabi, over-ambitious and unmanageable work projects, the lack of appropriate training and guidance and the economic necessity to forgo participation in "self-reliance projects" in order to struggle for their own economic survival. One of the teachers on the leadership side (R #330) had this to say: "Many teachers, despite vigorous politicization have not seriously carried out practically the requirement of self-reliance in schools. There has been lukewarm appreciation of the objectives of this policy."<sup>20</sup> Another teacher (R #261) commented that, "unless there is specialization and appropriate training on the part of teachers, regarding sr-activities, their involvement will be time unproductively wasted."<sup>21</sup> All in all, based on what was observed and heard, the investigator was strongly persuaded to conclude that although teachers did not overtly reject the

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<sup>20</sup>Teacher's response to questionnaire, 6 March 1986.

<sup>21</sup>Another teacher's response to questionnaire, 13 March 1986.

whole idea of "productive labor" (in fact many spoke favorably about it), their day to day behaviors do not seem to support the policy. Two cautions, however, should be born in mind. First, it is not true that teachers scorn manual work as such. On the contrary most teachers in the schools that were visited demonstrated that they appreciated manual work since they had private well-kept livestock or agricultural projects. Secondly, one needs to recognize the attitudinal variety that exists among teachers from school to school depending on the leadership style and organizational approach to the implementation of the policy in each school.

The above finding regarding the somewhat general lukewarm attitude among teachers toward the policy objectives would seem to agree with the outcome of the questionnaire regarding this aspect. Out of the 384 responses, only 118 (30.7 percent) strongly supported the idea that teachers had a positive attitude towards the policy. Moreover, only 11.5 percent of the ninety-six teachers supported the statement strongly. Also other researchers have identified a similar problem (Lema 1972, Mbilinyi 1984 and Almasi 1985). Nkonoki in his study of 1977 found that many teachers did not significantly involve their students in the planning of self-reliance projects. He also noted that,

many teachers are still acting as supervisors or inspectors who just watch, over students, when the latter are working in the school gardens without the teachers themselves demonstrating that working with a hoe in the school garden is not a shame.<sup>22</sup>

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<sup>22</sup>Nkonoki, "Education for Self-Reliance, p. 397; 404.

Saunders and Vulliamy (1983) argue that the teacher is the weakest link in the ESR chain. "Without training and reward," he says, "it is idealist to imagine that teachers will radically change their traditional, non-innovative patterns of interaction with students."<sup>23</sup> This quotation confirms the finding of this study, but at the same time warns the reader to avoid simply blaming the teachers who may be "victims of circumstances." The point of looking into the possible causes of teachers' apparently apathetic attitudes towards the policy will be further explored in Chapter VII.

Students' Attitudes towards the Policy. From interviews and conversations it was difficult to ascertain the true feelings of students toward the policy as a whole. They seemed to be well politicized, always giving the "right answer." A typical answer would be like this one which was given by a student-respondent R #175:

I personally prefer the inclusion of manual work in the secondary school curriculum. This will equip us with various manual work skills. This program will foster good cooperation between us, students. It will also enable us after school, to be involved in various manual work activities for both personal and national advancement.<sup>24</sup>

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<sup>23</sup>Quoted in Cooksey, "Policy and Practice in Tanzania Secondary Education", p. 191.

<sup>24</sup>Abridged from the Kiswahili text: "Mimi ninapendelea mfumo wa kazi za mikono katika ratiba ya shule za sekondari. Hii itatusaidia kuwa na uwezo na uzoefu katika fani mbali mbali katika kazi za mikono. Msimamo huu utaweza kustawisha ushirikiano kati yetu sisi wanafunzi. Pia hii itatusaidia kuwa na uwezo wa kufanya kazi mbali mbali za mikono katika maisha yetu ya baadaye kwa manufaa yetu binafsi na taifa zima." Student's response to the questionnaire, 9 April 1986.



However, a careful observation of some of the actions leads one to doubt their inspiring rhetoric. The investigator observed the quality of students' participation in self-reliance projects. It was found out that there was little correspondence between the enthusiasm displayed in words about the policy and the actual application to work. Not much was witnessed of the expected behavior displaying "moyo wa kujituma" (self-motivation or responsible independence), creativity, skill application and punctuality at work. The observer noted the contrast in behavior of students during the classroom work and manual work periods. When it was time for classes, students walked or run with enthusiasm, hurrying up to be punctual and were well prepared with the tools they need (books, exercise books, etc.) for classroom work. In contrast, when it was time for manual work, students walked sluggishly to the work projects, many without the necessary tools, arriving late and leaving before the assigned time if the teacher was not present. In a casual talk with students, it was disclosed who their heroes were. It was not students and schools that had excellent record in self-reliance projects but those who had excelled in academic achievement. It was also easily discernible that the predominant aspiration of students was for higher education or at least being employed in the modern sector. These and other subtle observations convinced the investigator that students were consciously or unconsciously paying "lip-service" to the policy whereas in real life, they had their own hidden agenda.

The above observation helps to clarify and confirm the quantitative finding that showed that only seventy-seven or 19.9 percent of 386 respondents supported the opinion that students had a positive attitude toward the policy as a whole. Of the ninety-seven teachers, only one supported the statement, and of the 284 students only seventy-six or 26.8 percent supported the aforesaid statement. The finding of this study is further corroborated by what other researchers have said about students' attitudes. The resilience of "die-hard" colonial attitudes towards manual work have been alluded to by Lema (1972, 1973, 1974), Nkonoki (1977), Mbilinyi (1984) and Mahai (1982). Nkonoki found a contradiction between the thrust of the policy and high aspiration (65 percent of the sample) of students to higher education. He noted that secondary education was seen by a substantial group of secondary school students as "a preparation for university degree studies which brighten their economic future for their own benefit and the benefit of their immediate relatives."<sup>25</sup> As for aspirations among Tanzanian students toward "white-collar jobs" in the modern sector, findings have been produced by Hoppers (1981), Mbilinyi (1984) and Almasi (1985). Almasi pointed out that "the majority of respondents in bias-designed and bias-adapted schools still preferred employment in the modern sector of the economy rather than take-up a farming

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<sup>25</sup>Nkonoki, "Education for Self-Reliance," pp. 353, 405.

career."<sup>26</sup> These findings in turn confirm what has been reported in general regarding attitudes of students in developing countries towards manual work oriented education. A World Bank finding reports that "there has been no consistent empirical indication of changes in the attitudes of students towards manual labor; in the majority of projects students still preferred academic fields to vocational training."<sup>27</sup>

The conclusion from all the above is that although secondary school students in Tanzania, at least the sample that was studied, are ideologically aware of the basic thrust of the policy, their actions do not prove substantially that they have wholeheartedly embraced it. This is the reality in the schools. However, from observation, this may not be due to the fact that students hate manual work per se, but due to students' hidden agenda, whose probable causes will be discussed in the next chapter.

Attitudes of Parents toward the Policy. In gathering information about this aspect of the study, the investigator conducted intensive interviews with six parents around the schools, made observations regarding parents' treatment of and aspirations for their secondary school children, and reflected on their own experiences in this matter. While the educated parents expressed

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<sup>26</sup>Almasi, "Implementation of Education for Self-Reliance," pp.

<sup>27</sup>S. Heynman, "Diversifying Secondary School Curricula in Developing Countries: An Implementation History and Some Policy Options," International Journal of Educational Development, (1985): 286.

their views on the policy articulated, the uneducated ones implied a lot by their "business as usual" actions. Three main ideas emerged from the interviews that were conducted. First, an opinion was expressed that the policy may be good but it is certainly unrealistic. To support this assertion some facts were mentioned. The conditions in rural areas were bad and so students were not attracted to return there after school. There are no provisions made for graduates willing to return to rural life for the acquisition of land or necessary tools for production. The rural tradition of paternalistic land ownership, whereby everything including the dependents' labor belongs to the pater-familias, is a threat to youths' independence in planning their own destiny. A priest who is involved in organizing school leavers for self-employment told the investigator that the constant cry of the youth is: "tupate wapi ardhi?" (Where can we get land?)<sup>28</sup> Moreover, villages have not yet been sufficiently mobilized or organized to welcome graduates of secondary schools by putting to use the knowledge and skills they have acquired. One parent I #19, complained about the nature of Cassell Forms which are filled for students at the end of secondary education for various jobs.<sup>29</sup> These forms list only "white collar jobs" in the modern sector and leave out altogether manual work jobs that may be available both in rural and urban areas. This indirectly

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<sup>28</sup>A remark made by a priest from the Bukoba Diocese involved in youth organizations, 10 April 1986.

<sup>29</sup>Interview with a parent in Bukoba, 1 May 1986.

belittles the "productive labor" orientation in education. I#18 summarized the unrealistic nature of the situation in these words: "The youth are prepared in school to be self-reliant, but where is the support system? Everything ends by the school's door."<sup>30</sup>

Another idea that was repeatedly expressed by parents is that they dislike self-reliance projects in schools because they are neither well planned nor well executed -- what is produced does not justify the students' time spent on the projects. One parent I#21 described the situation succinctly. "Mashamba ovyo, walimu hawapo, kazi ili mradi." (Farms poorly kept, teachers absent, work just for the sake of it.)<sup>31</sup> Parents pointed out that the weakest link in the policy's implementation chain is the teacher who has been demoralized because of his present socio-economic plight. By no fault entirely his own, the teacher's constructive presence in self-reliance projects as a "model" is very much missed by students.

The third idea that emerged is that some parents considered the actual manner of implementing the policy was a subtle way of social class reproduction. One parent I #21 made this remark: "Children of the influential and Indians perform excellently in academics and they are not so involved in manual work

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<sup>30</sup>Abridged from the Kiswahili text: "Vijana wanaandaliwa kujitegemea lakini wajitegemeeje bila nyenzo? Mambo yote yanaishia mlangoni." Ibid.

<sup>31</sup>Interview with a parent in Bukoba, 28 April 1986.

activities."<sup>32</sup> The implication of this is that it is the children of the ordinary peasants who are relegated to the acquisition of low-level manual skills while children of the bourgeois or petty-bourgeois class continue to pursue an elitist education. It was pointed out that the well-to-do are spending much money for the private academic tutoring of their children. Conversely, the poor parents cannot afford private tuition fees and so their children fail to compete academically with the children of the the well-to-do. This aggravated the parents concern over the seemingly unproductive sr-projects in schools.

Besides hearing the views of parents the researcher observed some behavioral indicators from parents regarding this question. It was observed that the old habit of "elitist treatment" of secondary school students was still alive and well among many parents. During vacation, many parents gave in to their children's requests to travel to cities visiting uncles, aunts, cousins, etc., instead of returning home to be involved in productive activities. When students approach the completion of their secondary education, parents run helter-skelter to make contacts and connections so that their children can get white-collar jobs in the modern sector. Parents' aspiration of higher education for their children is still very high: a Form IV--graduate who is not selected for Form V is regarded as unsuccessful though only about 13.5 percent (1980) of the Form

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<sup>32</sup>Ibid.

Four Cohort is selected for Form V.<sup>33</sup> Moreover, in the rating of parents, those schools and teachers are rated higher which perform better academically and promote more students to higher education. Except in educational circles, one hardly hears special praise being given to schools that have a good performance record as far as sr-projects are concerned. In short, the views expressed by parents that were interviewed and the indicators of "elitism" among parents that were observed point to the contradiction that still exists between parents' and policy aspirations.

The above finding supports the results of the opinion survey made in the school communities under study regarding parents' attitudes towards the policy. Only eighty-six (22.3 percent) of the 385 respondents strongly supported the opinion that parents were supportive of the policy. Twenty-two out of ninety-six teachers and sixty-three out of 284 students strongly supported the aforementioned opinion. Moreover, the finding of this study is confirmed by other researchers. Psychas in 1982 noted the same attitude among some of the parents at what he considered to be two models schools of education for self-reliance.

One father, a local village leader, became furious when he saw his daughters carrying wood. He said that educated people should not be doing such work and he threatened to

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<sup>33</sup>Form V promotion percentage calculated from statistics given in the United Republic of Tanzania, Educational System in Tanzania 1981-2000: Report and Recommendations of the 1982 Presidential Commission on Education (Dar-es-salaam: Republic of Tanzania, 1982), Vol. II pp. 10-11.

remove them from the school.<sup>34</sup>

Also Almasi (1985) agreeing with the findings of Lema (1974), Mosha (1976), Hoppers (1981), Makweta (1984) and Mbilinyi (1984), commented that parents still see secondary schools as places to prepare students for jobs in the modern sector, which is perceived as offering opportunities for better fringe benefits, high status, security and prospects of wealth and power.<sup>35</sup> Thus, these findings and that of this study indicate the fact the attitudes of parents are still in contradiction rather than in support of the policy. The implications of this situation will be discussed in the following chapter.

The Political Economy and the Inclusion of Manual Work in Schools. Under this aspect the interest of the study was to find whether or not the political and economic environment was favorable to the successful implementation of the policy. In other words, what kind of impact the greater society, both at national and local levels, was making on schools in the implementation of the policy under study? The following is what the investigator observed and heard regarding this issue.

Three main observations deserve mention here. First, the strategy of implementation is still essentially top-down politico-administrative. General directives are issued from the ministry of education to all schools, without seriously taking

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<sup>34</sup>Psychas, "Schools for Self-reliance: Two Tanzanian Secondary School Models," p. 209.

<sup>35</sup>Almasi, "Implementation of Education for Self-Reliance." p. 74.



into consideration the particular circumstances of each school. Moreover, schools operate under the pressure of just complying with the directives without a creative effort of interpreting and adapting the directives to the local situation. There is a sort of fear to go against the directives. This was partially evident in the schools' fear to phase out sr-projects which were no longer viable. In one school, the banana plantation had completely failed; in two schools, the tea plantations were no longer worthy of the name; in another school the pigs looked underfed and pitiable; yet these schools did not have the courage to eliminate these projects from their annual report to the Ministry of Education. The centralized bureaucratic control of sr-projects in schools does not help the implementation of the policy since prompt guidance and decision-making is either delayed or inadequate because of lack of details on the local situation. As a result, politicians give negative reinforcement to some schools, by praising a few schools for their quantitative achievement in productive activities without taking into account the particular circumstances of each school. Thus, the "politico-administrative" terms tends to discourage those schools which are environmentally badly placed to achieve that national recognition.

The second observation refers to the support system for the implementation. Philosophizing about the policy is good but by itself is not enough to ensure its success. It is imperative to have a concrete and realistic system to support the

implementation. Those who were interviewed in this regard expressed the opinion that the policy was lacking in this aspect. There were no adequate funds allocated for giving a take off to the sr-projects, buying fertilizers, and necessary tools. There was serious shortage of teachers properly trained to direct confidently sr-activities. One student R #154 gave his opinion that "manual work activities are not emphasized in schools because of the shortage of competent teachers in this area."<sup>36</sup> One teacher also commented: "if the system was properly organized, i.e., given proper emphasis by the government supplying all the necessary equipment and manpower, then I would be of the opinion that the policy of inclusion of manual work in secondary schools is beneficial to the pupils."<sup>37</sup> In addition, there was a lack of mobilization or coordination of other institutions to help schools achieve the aims for productive labor in schools. As mentioned earlier, it was difficult for schools to purchase essential articles for school shops and to obtain prompt professional assistance for the projects from local experts. Worse still, as was mentioned in the case of parents, the attitudes in the larger society toward education run counter to the essence of the policy. Opinion was expressed also that there was some sort of social class discrimination in the

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<sup>36</sup>Abridged from Kiswahili text: "Kwa upande wangu kazi za mikono kutoliliwa mkazo shuleni ni sababu ya upungufu wa walimu wenye uwezo wa somo hilo." Student's response to questionnaire, 9 April 1986.

<sup>37</sup>Teacher's response to questionnaire, 15 April 1986.

implementation of the policy. One student R #388 wondered why urban schools were not so much involved in manual work activities and yet were receiving better services from the Ministry of Education, while less attention was paid to the needs of rural schools that were very much involved in productive activities.<sup>38</sup> A similar complaint was echoed in a teacher's (R #17) question: "Is ESR meant only for the children of the poor or rural schools? What about children of the rich who go to international schools and later are sent to royal academies in Europe?"<sup>39</sup>

The third observation regarding the larger society vis-a-vis the policy of productive labor in schools concerns the reward system. Society in general is still rewarding those students who perform well academically rather than those who also do well in manual work activities. Cities and villages are not yet mobilized to offer opportunities for advancement to the youth not selected to either join the modern sector or pursue further studies. Indirectly, the society's reward system had affected the implementation of the policy in the way teachers are rewarded for their services. Teachers who are expected to play a vital role in the implementation of the policy are poorly rewarded by society. One teacher R #10 remarked to the investigator: "Supervision of sr-projects on the side of teachers is a failure because teachers after classes, engage in private projects for the survival of

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<sup>38</sup>Student's response to questionnaire, 6 March 1986.

<sup>39</sup>Teacher's response to questionnaire, 15 April 1986.

their own families."<sup>40</sup> It was observed that teachers' economic condition in general was so bad that very few students, if any at all, aspired to join the profession. A student was heard commenting on the teachers' economic condition in this way: "Teacher X went to the University for upgrading using ordinary rubber sandals but came back with sandals made out of a used car tire."<sup>41</sup> The contrast between the incomes and expenditures of teachers, as illustrated by the following two examples picked randomly in one of the six schools, helps to give an idea about the economic plight of the teachers. One teacher with a diploma (salary scale MS 2) without a family had a net monthly salary of 1,603.00 Tanzanian Shillings. When his basic needs were calculated, with a conservative estimation, it was found that he needed 2,827 shillings per month. Another teacher with a diploma (salary scale MS 3) with a family, had a net monthly salary of 1,895.50 Tanzania shillings while he needed 7,474.50 Tanzania shillings to meet the basic monthly needs of his family. How could these teachers make up for these differences between their real incomes and real needs? This situation to a great extent explains why teachers fail to participate faithfully with students during sr-activities.

The above findings show that the larger society still needs to take significant steps to support the schools in implementing

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<sup>40</sup>Ibid.

<sup>41</sup>Reference made by a parent during an interview in Kagera, 1 May 1986.

the policy of "productive labor" in the curriculum. The schools alone cannot succeed in achieving the desired objectives of the policy. This point has also been pointed out by other researchers. Foster (1965, 1969, 1984) has argued that programs of productive labor in schools will not succeed unless there is a "structure of incentives" within the economic system which makes the utilization of skills acquired at school both profitable and meaningful. Shivji (1973) pointed out that it is too idealistic to expect schools to change students' attitudes while contradictions in the capitalist structures of development continue to operate in the larger society. Nkonoki (1977) similarly remarked that students will not change attitudes and working relationships unless there is a corresponding change in the wider society. Mbilinyi (1979) emphasized the importance of improving the economic base of villages to provide better employment for the youth as an essential element of making ESR a success. Last, not not least, Nyerere (1985) has admitted that "education is not something which is just done in schools -- but is affected by the social mores, the physical and social environment, the press, the radio and so on."<sup>42</sup> The words of Sifuna regarding the vocational curriculum in Kenya give a good summary of the problem that has been observed also in Tanzania.

Children are motivated by social forces outside the school and will continue to be influenced by these forces while in attendance. In other words, the impact of the classroom will depend upon how consistent it is with the

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<sup>42</sup>Julius K. Nyerere, "Education in Tanzania," Harvard Educational Review 1 (February 1985): 45.

attitudes of the general society and the attitudes of the school children as to why they are in school.<sup>43</sup>

In short, this study identified the persistence of the problem that political, social and economic forces in the larger society are still a serious drawback for the success of the policy. Implications of this finding will be discussed in Chapter VII.

### Some Key Issues related to SR-projects in Schools

This section of the chapter presents what was observed and heard regarding the impact of sr-projects on academic performance of schools, the assessment procedures of these activities, and the general public's perception of the policy as good or bad.

Impact of SR-activities on Academic Performance. The classroom environment observed did not seem to be favorable to the acquisition of competitive cognitive skills. In many classrooms there was shortage of sitting desks for students, maps, charts and other educational visual aids. Textbooks were a big problem. In one school, there were only thirty books for 120 students of Form III and Form IV literature classes. In another school's mathematics class, the teacher said he had no choice but to use a 1959 edition of a math textbook which was the only one available. The methods of teaching were predominantly "talk and chalk" and "copy-copy" interrupted occasionally by choruses of "yes" by students in answer to the teachers' popular question: "Do you understand?" Teachers did most of the talking in the

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<sup>43</sup>Daniel N. Sifuna, "The Vocational Curriculum in Primary Education in Kenya: an Evaluation" Prospects 1 (1986): 131.

class (about 95 percent of the time). Students' activity in the classroom is handicapped by a critical shortage of exercise books, textbooks, chemicals and equipment for experiments. In one chemistry class it was distressful to see the teacher explaining "solubility" theoretically without making any experiment with the students. As a result, the main academic activity of students is to copy teachers' notes in their copybooks. One could sense that students had a linguistic problem.<sup>44</sup> They could not easily express themselves in English and therefore hesitated to ask questions. If they did, they asked questions mostly for information rather than explanation. In a nutshell, one could sense the tension between the students' eagerness to learn and the inadequate and subduing classroom atmosphere that failed to tap students' creativity and quench their thirst for knowledge. These observations agree with the situation described by Mbilinyi in 1975 that: the "copy-copy

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<sup>44</sup>The linguistic problem in Tanzania secondary education is depicted by the findings of Crippier and Dodd, 1985.

By the second term of Form I: 'Sixty percent are still at the level where they could read only 500 word picture books. There is no way that such pupils could follow instruction in other subjects through English' halfway through Form IV. . . . the number getting within reach of being able to read easy unsimplified texts is less than 10 percent [sic]. It is extremely worrying to find that nearly one third of all pupils are still at the picture book level after four years of official English medium education. These results are a clear indication that throughout their secondary school career little or no subject information is getting across to about fifty percent of pupils in our sample. Only about ten percent of Form IVs are at a level at which one might expect English medium education to begin. Quoted in Cooksey, "Policy and Practice in Tanzania Secondary Education," p. 189.

method" was dominant in schools; "a hard-working and dedicated teacher is rare in some schools;" and "classrooms are overcrowded and lack enough furniture with students sitting in rows fashion, facing the teacher's desk with backs towards each other."<sup>45</sup>

The above background of the academic environment in Tanzanian schools seems to correspond to the decline in cognitive achievement levels of secondary students as reported by a World Bank/UNESCO study of 1981. The study based on a sample of Form I and Form III students in eight government and four private schools has been summarized by Cooksey as follows:

In Mathematics, Form III students had a correct response rate of 54.2 almost identical to students in the comparable class in twelve developed countries. But the average age of the Form III students was four years more than that of students from the developed countries (17 vs 13). This might not seem too wide a gap, except that we are comparing students from countries with universal secondary education with highly selected Tanzanian students. If we compared the latter with the top 2-5% of the European and North American students, we would obtain a much less flattering picture from the Tanzania students' point of view (1981, pp. 6-7). The same argument applies for the reading and science tests.

In the reading test, Form I students (15-year olds) had lower average scores than 10-year olds from 10 developed countries and India, and Form III students fared similarly in comparison with 14-year olds from the same countries, plus Iran. In science, scores compared favourably with those of Form I students in four developing countries (India, Chile, Iran and Thailand), but unfavourably with those of developed countries. Moreover, Form III scores were only marginally better than Form I scores on the (same) maths and reading tests, showing that the 'cognitive yield' of two years of schooling was very meagre, a finding replicated in

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<sup>45</sup>Marjorie Mbilinyi, "The Colonization Process in our Schools," (Dar-es-salaam, 1975), p. 1.



the research on English competence."<sup>46</sup>

The decline of achievement levels in cognitive skills among secondary students in Tanzania is undeniable. But is the introduction of sr-activities in schools a contributory factor to this decline? Maliyamkono (1977) argued that productive activities have a neutral effect on academic performance. The opinion survey that was conducted for this study showed that only seventy-seven (20.2 percent) of the 382 respondents strongly supported the proposition that sr-activities enhance academics. One wonders which is which. The conclusion that emerges from the interviews is that sr-activities can contribute to the decline of academic performance not per se but per accidens due to bad planning. When the "optimum time" for cognitive work is not respected, when manual work projects are over-ambitious and when the time table is overcrowded, there is danger of encroaching on the precious time needed both by students and teachers to do remedial work to enhance the cognitive skills. That partially explains the difference in answers to this question between schools with relatively better organized sr-projects and those whose programs are not so well organized. In the sample for this study, in one school with better organized productive labor program, only 8.2 percent of sixty-one respondents indicated that sr-activities were undermining academic performance. In Ruvu Secondary School (not one of the samples in this study) known for

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<sup>46</sup>World Bank/UNESCO Study of 1981 in Cooksey, "Policy and Practice in Tanzania Secondary Schools" (1986), p. 186.

its better organized productive labor program, a student gave this response to the investigator: "There is no interference between academic and manual work program because time tables for sr-activities for the year, month and week are discussed well in advance and pinned on all the notice-boards in the school."<sup>47</sup>

To recapitulate, the findings of this study imply the lack of a well organized and balanced school program of productive activities. This in part adversely affects the already deteriorating academic performance of schools caused by several other factors. Unless serious effort is made to redress this situation, there is real danger that the Tanzanian educational system will fail to impart both the basic principles of science and technology and skills training required by students to meet the demands of the modern competitive technological world. Thus, those involved in a critical evaluation of sr-projects must take into serious consideration the warning given by Mbilinyi that,

the basis of a socialist and self-reliant society cannot be basket-weaving, carpentry or hoe agriculture. Industrialization of all sectors, utilization of local energies and skills, and release of people's creative and critical energies are necessary.<sup>48</sup>

More careful planning is necessary so that sr-activities are not there to the detriment of academic standards but for reciprocal enhancement.

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<sup>47</sup>Interview held at Ruvu Secondary School, Coast Region, 30 May 1986.

<sup>48</sup>Marjorie J. Mbilinyi, "Secondary Education" in H. Hinzen and V.H. Hundsdorfer (Eds), Education for Liberation and Development: the Tanzanian Experience (Hamburg: UNESCO Institute for Education, 1982), p. 112.

Assessment Procedures of SR-Activities. It is one thing to include a subject or an activity in the school curriculum but it is quite another to establish an efficient way of assessing whether the objectives of that activity are being achieved or not. This study was therefore interested in finding out if fair and effective procedures for evaluating sr-activities were already established in the Ministry of Education, in schools, and in the National Examination Council. The observations from that research effort are presented below.

At the ministerial level, schools are assessed for their performance in sr-activities using only a vague economic criterion. For example, the "success" of sr-activities in schools for 1984 was reported thus:

In spite of the various problems confronting self-reliance activities progress has been recorded year after year. For example, for 1981, every shilling that was invested in such activities yielded a profit of 0.25 shillings, for 1982, the profit was sh. 0.44 per shilling, for 1983, sh. 0.50 per shilling and for 1984, shs. 0.55 per shilling.

Schools which reached or exceeded the national target of 25 percent of the catering expenses were listed as most successful. The following seventeen out of eighty-five public schools were listed in terms of percentage of the target reached:

Forodhani (155.9 %), Kibiti (135.8%), Ruvu (128.8), Kibaha (95.8%), Kilosa (92.2%), Machame (88.3%), Weruweru (81.9%), Msalato (75.8%), Same (73.5%), Ilboru (70.1%), Karatu (65.2%), Lindi (63.1%), Chidya (62.1%), Ifakara (59.2%), Ndanda (57.5%), Mtwara "Tech" (52.3%) and Songea Boys (50.7%).<sup>49</sup>

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<sup>49</sup>Ministry of Education [Tanzania], "Success or Productive Activities in Secondary Schools 1984," (Dar-es-salaam: Circular No. EDS.R6/1/177m 22 August 1985), pp. 1-2. (Mimeographed.)

What is puzzling about this type of assessment is that it neither takes into account the relative advantages and disadvantages of different schools, nor does it address the other important objectives of productive labor in schools. The wrong message that is conveyed to schools by such reports is that what really matters is merely quantitative productivity. It is needless to mention that if all the objectives of sr-activities are to be taken seriously, there is a need to develop fair procedures of assessing these activities on the national level which take into account all the aims.

At the school level, the greatest problem that faces teachers is how to fairly assess students in regard to sr-activities. At the end of each school term, teachers perform a challenging exercise of filling forms for students regarding character and attitude to work. Figure 13 shows the items included in such forms. This assessment is important as it affects the awarding of certificates to students at the conclusion of secondary education. As far as the assessment of manual work activities is concerned, it was observed that there were no well established procedures for doing this job. In one school, teachers depended on the general observation of students at work. However, given the fact that absenteeism at manual work activities is very high among teachers, one doubts the reliability of such a method of assessment.

Fig. 13. Assessment of Character and Attitude to Work

No.	Item	ITEM	GRADE
901	Performs duties satisfactorily		
902	Quality of work performed		
	Quantity of work performed		
903	Values, likes and respects work		
904	Cares for personal property		
	Cares for public property		
	Cares for other's property		
905	Works well with others regardless of their status or rank		
906	Shows respect for fellow students		
	Shows respect for staff		
	Shows respect for the general public		
907	Is sought by others for advice		
	Inspires others to follow him/her		
	Voluntarily leads others to complete a task		
908	Willingly obeys orders and follows instructions when required		
	Accepts reasonable demands although disliking them		
909	Cares for personal cleanliness		
910	Is trustworthy		
911	Participates in games and sports		
	Participates in cultural activities		

Key for Grades: A = Excellent; B = Good; C = Average;  
D = Weak; E = Poor.

Source: School Records Omumwani Secondary School, Bukoba.

In other schools, each student was allocated a piece of work, such as a row of tomato plots, which was regularly inspected by a teacher for the assessment of the student. Both students and teachers were dissatisfied with this method. Teachers tended to merely inspect the "piece of work" without paying due attention to all aspects intended for the students' involvement in productive activities. In short, from conversations with teachers and students regarding this aspect, one sensed the need of a better defined procedure that would assess not merely the economic, but all aspects of sr-activities.

Lastly, the National Examinations Council has an important impact on the assessment of sr-activities. Since 1976, a new examination system was established. It combines academic assessment (i.e., continuous assessment of written exercises = 20%, terminal tests = 25%, annual project = 5% and Final National Examination = 50%), along with the assessment of character and attitude toward work. Table 27 shows the effect of the assessment of character and attitude toward work on National Examinations from 1976 -82. The impression one gets from the table is that the number of candidates with "poor character" has been reduced considerably from 299 (2.4%) in 1976 to 23 (0.1) in 1982. Does this in fact mean that character and attitude toward work has so much improved in schools? This is not quite supported by what was observed in the schools. The explanation behind the above figures seems to be that schools and teachers, under public pressures of having their schools do well in the National Examination, have

gradually become less strict in the evaluation of character and attitude toward work lest they adversely affect the final outcome. This practice makes one doubt about the fairness of the whole assessment procedure of sr-activities.

TABLE 27  
CHARACTER ASSESSMENT EFFECT FOR THE PERIOD  
1976-82

Year	No. of Schs.	Schs. with Character Failures		Tot. No. of Candidates	No. of Candidates who would have obtained Division					Candidates with poor Character	
		No.	%		I	II	III	IV	0	No.	%
1976	128	47	36.7	12,624	0	2	31	135	134	299	2.4
1977	135	48	35.6	13,143	0	2	12	75	75	164	1.2
1978	146	28	19.2	13,971	0	0	2	22	36	60	0.4
1979	150	25	16.7	15,127	0	1	4	16	20	41	0.3
1980	158	10	6.3	16,169	0	0	1	8	14	23	0.1
1981	158	3	1.9	16,526	2	2	8	8	3	23	0.1
1982	173	9	5.2	17,340	0	0	0	13	10	23	0.1
Cummulative Totals				104,900	2	7	28	277	292	633	0.6

Source: The Sub-Regional Meeting of Institutions Responsible For Educational Assessment East and Southern Africa 12th September - 14th September 1983 (Dar-es-salaam: National Examinations Council, 1983), p. 41.

Ndyetabura who researched this question in 1978 expressed his doubts about the fairness of assessment procedures in these words:

Perhaps some of the students are not treated justly and perhaps other are favored. Other mistakes show up in checking the forms school by school. Some teachers fill in the same mark for every student so as to appear having excellent character. This, however, may not be fair to other schools.<sup>50</sup>

Because of the above danger of victimization of students, subjectivism on the part of teachers and the difficulties of time and procedures required for a just assessment, the National Examination Council has tactfully played down the role of character assessment in the final results. For example:

A mere 0.1 percent of the 13,340 students who sat for the examination in 1976 qualified in the academic section but failed to receive a certificate because of their low character assessment.<sup>51</sup>

The investigator obtained two more pieces of evidence of this low profile played by character and attitude-to-work assessment at the Examination Council. First, the current rating of character is: Good, Average and Bad. Students labelled "Bad" may not be awarded a certificate but all those with "Good" or "Average" may

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<sup>50</sup>Veddy L. Ndyetabura, The Effect of Character Assessment on Examination Results of 1978 (Dar-es-salaam: National Examinations Council of Tanzania; 1978), p. 31. Translated from the Kiswahili text: "Pengine baadhi ya wanafunzi hawatendewi haki au pengine baadhi ya wanafunzi wanapendelewa. Makosa mengine yanajionyesha wakati wa kuchambua fomu za shule kwa shule. Walimu wengine wanajaza alama sawa kwa kila mwanafunzi, mradi mwanafunzi aonekane ana tabia nzuri sana. Pengine hii si haki kwa wanafunzi wa shule nyingine."

<sup>51</sup>Court and Kinyanjui (1978) quoted in Cooksey, "Policy and Practice in Tanzania Secondary Education" (1986), p. 190



be awarded any Division, One to Four, depending on their academic performance.<sup>52</sup> Secondly, one of the interviewee I #8 at the Council commented on the question of "character assessment" as follows:

Good character is important in so far as we can reasonably expect the student in question to render service to his or her nation. However, good behavior alone is not enough to produce a scientist and therefore it is imperative to lay more stress on academic performance.<sup>53</sup>

Since students and schools as a whole are very highly motivated by national examination results and know where the emphasis lies, they act accordingly even if they give lipservice to sr-activities or even adopt an hypocritical stance.

In summary, the organizational complexity and confusion regarding fair procedures of assessing sr-activities at the school, Ministry of Education and National Examinations Council levels is still overwhelming. As a result, it would seem students and teachers have made a tacit practical decision to concentrate on written examinations as the main assessment procedure that really matters for their future.<sup>54</sup> This perception among students and teachers appears to be confirmed by the quantitative

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<sup>52</sup>See also, National Examinations' Council, Examinations Regulations and Formats (Dar-es-salaam: 1984), pp. 9-11).

<sup>53</sup>Interview with an official from the Examination Council, Dar es salaam, 4 February 1986.

<sup>54</sup>See also Kenneth King, "Evaluating the Context of Diversified Secondary Education in Tanzania: Preliminary Comments," in Tanzania After Nyerere: An International Conference on the Economic, Political, and Social Issues facing Tanzania June 26-27 1986 (London University: Centre for African Studies, 1986), p. 5.

findings of this study. In response to the question regarding the relevance of sr-activities to educational promotion, only fifty-eight (15.1 percent) of 383 respondents strongly agreed that sr-activities had relevance to higher education. Of these only 4 percent of ninety-seven teachers and 19.2 percent of 281 students indicated agreement with that opinion. This also agrees with what was noted by Saunders and Vulliamy in 1983.

It may be that many teachers passes students as good or very good in the assessment of self-reliance as a formality. Despite this component in the assessment system, teachers may well see student success in the academic exams as the most significant aim in their teaching.<sup>55</sup>

Therefore, the lack of a fair and effective system of assessment implies a debilitating effect on the implementation of the policy of including "productive labor" in the school curriculum.

### The Overall Perception of the Policy

After the key aspects of the policy of manual work in schools had been investigated, the researcher was interested in determining whether the policy as a whole was accepted or whether there was substantial evidence of those advocating its reversal. In other words, are the problems that have been discussed in this chapter seen as problems of the implementation process or as problems resulting from a wrong and misdirected policy that ought to be radically changed? The following paragraph summarizes the findings on this aspect of the study.

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<sup>55</sup>Murray Saunders and Graham Vulliamy, "The Implementation of Curricular Reform: Tanzania and Papua New Guinea," Comparative Education Preview 3 (October 1983): 358.

In the paper and pencil comments on the general question about the policy, out of 391 respondents, 105 explicitly praised the policy; twenty expressed the view that the policy ought to be changed and the rest implicitly supported the policy by only limiting their criticism and suggestions for change to the details pertaining to implementation. One student R #343 had this to say about the policy.

The inclusion of manual work in the school curriculum is a very useful policy. It enables students to acquire practical skills and knowledge required for development and which they can later on share with those who did not have the opportunity to go to school.<sup>56</sup>

Another example of positive comment about the policy was given by a teacher R #335.

The inclusion of manual work in the secondary school curriculum is essential for the training of the right people who could be in any position to enhance the development of a poor country like Tanzania. . . . The only cadre of workers who would be employed constructively in Tanzania would be those with a positive attitude towards manual work.<sup>57</sup>

In all the interviews conducted by the researcher, not a single instance was recorded of a radical opposition to the policy per se. It was the implementation process which was severely criticized. Some instances of the positive impact of the policy on students were cited here and there. One parent praised his three children (two girls and one boy), graduates of Form VI who decided to stay at home and manage their father's farm. The investigator conducted an interview with these graduates who

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<sup>56</sup>Student's response to questionnaire, 6 March 1986.

<sup>57</sup>Teacher's response to questionnaire, 6 March 1986.

manifested great satisfaction with their decision.<sup>58</sup> Two parents spoke proudly of their children, graduates of secondary school. One was managing a well-kept and fruitful tomato garden, another one was earning a good living by keeping two dairy cow which his father had bought for him.<sup>59</sup> The principal of Ruvu Secondary School, one of the success story as regards this policy, read to the investigator several letters from graduates of that school to continue preparing students for life in that way. One graduate mentioned in his letter that he was self-employed in the village. He had cultivated three acres of beans and ten acres of corn using ox-ploughs. He said that the type of education he had received had made him respectable in the eyes of his parents and the nation.<sup>60</sup>

The cumulative message of the above findings is that the policy as a whole is accepted as a correct orientation for education which is relevant to the conditions and needs of the Tanzanian society. The quantitative findings of this study convey the same message. In reply to the question regarding the preferred model of secondary school, 258 (66.8 percent) of 386 respondents indicated that they favored a secondary school model where manual work is an integral part of the curriculum. Only 33.2 percent (128) of the respondents preferred a pure academic

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<sup>58</sup>Interview with a family in Bukoba, 2 May 1986.

<sup>59</sup>Reference made during an interview with a parent in Bukoba, 1 May 1986.

<sup>60</sup>Letter read to the researcher during the interview with the principal of Ruvu Secondary School, Coast Region, 30 May 1986.

curriculum. Thus, in spite of the gruesome picture emerging from a critical scrutiny of the implementation process, the bold attempt to integrate manual work with education in order to build a more relevant, dynamic and productive system of education is still appreciated by most Tanzanians. The following chapter will summarize the key findings of this study and discuss their implications for the much-needed improvement of the implementation strategy and process.

## CHAPTER VII

### SUMMARY OF FINDINGS, DISCUSSION AND IMPLICATIONS FOR IMPLEMENTATION

As stated in the introduction, this exploratory work, based on a case study of six secondary schools, set out to investigate how the aims of self-reliance activities or manual work projects in schools were understood and implemented including the factors affecting this implementation. This chapter attempts to summarize and discuss the findings in this regard. Before concluding the chapter, some recommendations for implementation are proposed and areas for further research are suggested.

#### Objectives of Manual Work in Secondary Schools

This investigation did show that, in the minds of the majority of the clients of this important reform, there is still confusion, misinterpretation and a lack of comprehensive understanding of its objectives. One wonders why such a situation should obtain after twenty years of praxis and formal political education. Two reasons are suggested as clues to understanding this state of affairs. First, the objectives of self-reliance activities in schools taken as a whole are a vague and ambitious politico-ideological statement which seems to pay little attention to the nature of the educational institution. The school is presumed capable of solving problems that belong to

other institutions of the social system, such as the economic and political institutions. It is not clarified in the statement of objectives as to which of them are primary and secondary. Moreover, the way the objectives are formulated, they are more society-centered than child-centered. No mention is made of the joys and intrinsic values students can derive from voluntarily engaging in manual work activities in school. Sinclair, who has made a comparative study of the objectives of work experiences in schools in different parts of the world, has characterized them as over-ambitious and tending to dump the solution of all the socio-economic problems on the school.<sup>1</sup> Tanzania's case does not seem to be the exception. At this juncture, it is imperative to redefine and prioritize the objectives of sr-activities, taking into account the specific nature and role of the educational institution (i.e., what it can and cannot do) and balancing the child and society-centeredness in these activities.

The second possible cause of the confusion is the apparent overlapping of the aims of "diversification" and sr-activities in schools. When the former was introduced in 1971, no significant effort was made to clarify the differences in objectives of these two types of school reforms. The investigator would like to argue that although both innovations have a general objective of moving

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<sup>1</sup>Margaret E. Sinclair, "Introducing Work-Experience Programmes in Third World Schools", Prospects, 7 (1977): 365. See also ESR as "Move of a Cultural Statement than a Curriculum Policy Document," in Murray Saunders and Graham Vulliamy, "The Implementation of Curricular Reform: Tanzania and Papua New Guinea," Comparative Education Review 27 (October, 1983): 356.

away from a pure academic curriculum to a practical one in order to free students from theoretical trappings, they differ in their specific objectives. Whereas sr-reliance activities would seem to deal with the initiation of the youth into the appreciation of manual work as a rewarding and desirable form of life, diversification or vocationalization is more directed to imparting specific skills relevant to the world of work. Whereas there is a practical consensus among educationists concerning the desirability of the integration of the former in the secondary school curriculum, there is controversy regarding the latter. For example, it is argued against diversification in Tanzanian schools that it prepares students for jobs which which do not exist and conditions them to the status quo, that the organizational capacity (material resources and trained personnel) is not adequate to handle such a massive reform, that generally employees prefer graduates with "analytical" rather than "job skills," and that diversification increases the financial burden of the secondary school system without verifiable economic benefits. For the latter argument, Heynman had this to say:

Students who have experienced diversified curricular options have learned more vocational-type skills than others, but they do not appear to be at a labor market advantage. Though it costs anywhere from 30 to 40 percent more to educate a secondary school student through a diversified curriculum. The evidence suggest that there is not identifiable economic return which would justify this



additional investment.<sup>2</sup>

Although one could argue against Heynman's consideration of only economic return, the challenge remains that there is no evidence from research to justify the "additional investment" on the basis of educational return. In short, the controversial nature of a "diversified curriculum" is still strong, whereas almost all educators agree that the general inclusion of manual work in the curriculum is an essential element of education or is necessary for the formation of an all-round person. Accordingly, it is imperative to clarify and differentiate the objectives of both the innovations so that a clear policy choice can be made to either proceed implementing both of them or selecting one of them given the actual constraints of time and resources. The author is persuaded that given the Tanzanian situation of the scarcity of resources, the urgency to improve the quality of education, and the high investment required for an effective "diversified

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<sup>2</sup>S. Heynman, "Diversifying Secondary School Curricula in Developing Countries: An Implementation History and Some Policy Options," 5 (1985): 286. For further readings concerning this controversy, see Philip J. Foster, "The Vocational School Fallacy in Development Planning" in Arnold C. Anderson and Mary Jean Bowman, eds., Education and Economic Development (Chicago: Aldine, 1965) and idem., "Education for Self-Reliance: A Critical Evaluation" in Richard Jolly, ed., Education in Africa: Research and Action (Nairobi: East Africa Publishing House, 1969), pp. 81-101, and idem., "Some Policy Implications of the Tanzanian and Columbian Studies", (Washington, D.C.: the World Bank, Education and Training Department, Sept. 24, 1984), and G. Psacharopoulos and W. Loxley, Diversified Secondary Education and Development: Evidence from Columbia and Tanzania, (Baltimore: Johns Hopkins University Press, 1985), and Faustin B. Mukyanuzi, "The Political Economy of Educational Reforms in Tanzania: The Secondary Curriculum and National Development", (Ph.D. dissertation, Stanford University, 1985).

curriculum," it is imperative to consider the option of concentrating on the improvement of the educational quality of self-reliance projects and leaving the "diversified curriculum" for a few well selected pilot schools.

### outcomes of the Policy

Offsetting Educational Costs. The study did show that there is no firm foundation on which to base the affirmation that sr-activities are contributing significantly to the alleviation of educational costs. The performance of the schools that were studied, in regard to meeting the national target of 25 percent of the catering expenses, ranged from 5.3 percent to 1.09 percent. On the national level, it is estimated that the average contribution is 15 percent of the catering services. What was discerned from the study is that these figures and many others quoted in official documents are highly unreliable due to lack of a vigorous dependable system of collecting the relevant data. Often, the cost in terms of students' time, financial and material investments, acreage and expertise-time involved is not strictly taken into account in evaluating the net profit. In order to improve the economic aspects of sr-activities, several suggestions were given by the interviewees. First, the need of a procedure to seriously evaluate the economic returns of manual projects in order to justify the students' precious time spent on these activities was expressed. Secondly, it was suggested that, since the 25 percent national target was unrealistic for some

schools, it would be better if the school in consultation with the School Board and local and Ministry experts, would set its own production target -- a more realistic one that takes into account the local conditions. Thirdly, the ideas of "scientific approach," "specialization" and "going small" in favor of manageable good quality projects were repeatedly suggested by well-wishers of the policy. Finally, although the dominant thrust of sr-activities has been production ("uzalishaji Mali"), the nature of the educational institution demands that the economic aim be secondary to the educational aim. If this is not heeded, the law of diminishing returns is bound to operate as teachers and students will tend to see themselves as tools of production rather than agents and clients of an educational process. The above ideas may be useful food-for-thought for policy-makers in reviewing the economic aim of sr-activities.

The Politico-Ideological Outcome. The study did show that the positive attitude towards manual work intended by the reform was manifested more in words than in actions. It was paradoxical to hear students speak so favorably and correctly about the dignity of manual work and yet observe with disappointment the poor quality of participation at the sites of manual work activities. It was evident that the "correct ideology" about the importance of manual work had been imparted to students through "politicization" but the more important educational task of making students love manual work had not yet been accomplished. Straughan suggests three important moments in teaching moral

attitudes: "teaching that \_\_\_\_\_," "teaching how \_\_\_\_\_" and "teaching to \_\_\_\_\_."<sup>3</sup> First, in the case of a positive attitude towards manual work, "teaching that \_\_\_\_\_" implies that students be made conscious as to the rational justification of the goodness of manual work. It seems this has been achieved to a great extent through political education and discussions of "Self-Reliance Committees" in the schools. But it ought to be remembered that "theoretical justification" is a necessary, but not a sufficient condition for students to elicit behavior that is favorable to manual work.

Secondly, "teach how \_\_\_\_\_" implies exposing students to sound scientific guidance, constructive experiences of work in and outside school, and efficient organization of work so that they can confidently manifest their appreciation of manual work. The sample of schools that was studied did show that very little has been done in this respect. Both scientific guidance and constructive experiences are lacking. Although guidelines of efficient organization are available on paper, the execution of these guidelines is in most cases very poor.

Thirdly, "teaching to \_\_\_\_\_" implies touching the feeling of students in such a way that they form the habit of willingly and even lovingly engaging in manual work activities. This can be achieved through a students' democratic participation in the planning, execution and sharing of the fruits of manual work

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<sup>3</sup>Roger Straughan, Can We Teach Children to be Good (London: George Allen and Unwin, 1982), passim.

activities, a committed leadership of teachers, and a good example from the wider community. Admittedly, something has been initiated with regard to democratic participation, but much needs to be accomplished concerning the two other points.

The lesson, therefore, from the study is that the "ideologization" of students or "teaching that \_\_\_\_" alone would not produce an outcome of good attitude towards manual work. It is imperative in this second phase of Tanzanian educational development ("Awamu ya Pili") for the policy-makers to shift the emphasis from just "politicization" of students to dealing realistically with the complexities and day-to-day struggles of both "teaching how \_\_\_\_" and "teaching to \_\_\_\_" appreciate manual work.

The Scientific-Technical Outcome. The best that could be concluded from this study in regard to this aspect is that this aim was being realized only marginally. Except for a few, the majority of the sr-projects appeared did not demonstrate that students were gaining better scientific knowledge and skills through such experiences. In fact, in most cases, the work done in these projects was inferior to that of the average peasants. The main causes behind this situation are that students are not well provided with expert guidance of teachers and that due to the critical shortage of resources required for the provision of relevant equipment and materials, students are confined to "sisyphean" low-type production. The danger from this is that students get bored because of a lack of new learnings in terms of

scientific knowledge and skills. Many students and teachers who were interviewed expressed a strong opinion that initiation of students into the use of modern technology and scientific methods of production would better motivate students to be involved in productive activities. A similar view is suggested by Mahler that "only technologically creative work in which repetition is increasingly overcome by innovation and passivity by active involvement" may be considered part of useful education.<sup>4</sup> Thus, if sr-activities are meant to improve rather than perpetuate a poor mode of production and integrate classroom work and manual work, it is imperative to take into consideration the following three suggestions. First, taking into account resources available, projects should be chosen with the explicit intent of teaching a higher mode of production not mere production for its own sake. This can be a source of motivation and attraction for greater and more student participation in productive activities, especially in schools. Secondly, manual work tasks should be well planned and relevant expertise should be readily made available to students. Similar concern and seriousness shown in the preparation of classroom work should also be shown in the preparation of manual work periods. This would demand the committed dedication and proper guidance from curriculum developers. Thirdly, teachers should be well-equipped with the

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<sup>4</sup>Fred Mahler, "Education and Work: An Approach to Anticipatory Socialization" in UNESCO, International Meeting of Experts on the Promotion of Productive Work in Education (Paris, France: November 24-28, 1980), p. 73.

know-how or required skills and be motivated so as to impart this to students by committed participation in self-reliance activities. In short, it is of primary importance that policy-makers pay serious attention to the "teaching how \_\_\_\_" aspect of sr-activities.

The Relationship between Academic and Manual Work Activities. On the whole, the study has shown that a wholesome relationship between what is taught in the classroom and in sr-activities has not yet been formed. It is only in a few instances here and there when it was stated that sr-activities helped to clarify the theories learned in the classroom. Poor organization and execution of sr-activities hindered the schools to carry out the merger of theory and practice as originally intended. On the other hand, there are two things in the classroom work that ought to be noted. First, due to a variety of causes, the main ones of which are constraints in resources and, to a certain extent, bad planning, the academic standards are low. This factor has serious repercussions on sr-activities in as much as without a mastery of the basic principles of classroom work, it is grossly naive to speak of merging theory and practice.

The shaky mastery of academic subjects manifested in the classroom by both teachers and students undermines the confidence required to apply scientific principles to sr-activities. Socialist education or the struggle against "elitism" should not be confused with "diluted academic performance." This is even noted in such socialist countries as Cuba and China, where

studies seem to indicate that their recent educational developments emphasize and stress the importance of a sound academic foundation as essential for coping up with the modern technological world.<sup>5</sup> The following recent orientation in Russian secondary education is of great relevance to Tanzania:

The objective should be to provide high level general training through the lower secondary schools, emphasizing language, including writing, mathematics and science. . . these subjects are seen as the basis for learning not only for the high manual skills but also for acquiring competence to work in the various occupations described by the term 'technician.'<sup>6</sup>

In short, there is need to tone down the ideological overreaction against the classical curriculum and take realistic steps to enhance a sound academic foundation which will in turn facilitate the acquisition of higher manual skills needed for development. Moreover, the secondary phase of education ought to be respected as the optimum period during which foundation is laid for scientific and technological cognitive skills which at a later age would be very difficult if not impossible to acquire.

Secondly, the authoritarian structures in the classroom, teaching methods of "chalk and talk" and "copy-copy" hinder the

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<sup>5</sup>See The World Bank, Cuba: Economic Change and Education Reform 1955-1974 (Washington D.C.: World Bank Staff Working Paper No.317, January 1979), pp. 107-111 and Lawrence Kavich, "Education - Key to Peoples' Republic of China's Industrial Power" (University of Northern Iowa: Department of Educational Psychology and Foundations, Paper presented on Nov. 4, 1982) p. 3, and Jean C. Robinson, "Decentralization, Money and Power: The Case of People-run Schools in China", Comparative Education Review 1 (February 1986): 82-88.

<sup>6</sup>The World Bank, Educational Reform in the Soviet Union: Implications for Developing Countries (Washington, D.C.: Bank Staff Working Paper, No. 288, May 1978), p. 75.



development of free creative and innovative personalities. This resembles what was observed by Bowles in Cuban schools:

The structure of the classroom itself seems to have resisted the winds of revolution. In the vast majority of classes which I visited, the method of instruction could best be described as catechistic, authoritarian, teacher-centered approach characterized by a simple teacher talking at a class of passive students. . . . Exams and grades still seem to be a central element in the motivation of students, thus maintaining a structure of rewards external to the process of learning and analogous to wages in capitalistic labor market.<sup>7</sup>

Following the "correspondence principle," classroom social relations are reproduced in sr-activities by students merely doing what they are told as long as they are supervised and for a good assessment by teachers. As a consequence, one notices a remarkable lack of creativity and initiative on the part of students during sr-activities. The above situation demands quick steps to be taken in order to improve the relationship between academic and manual work activities. Self-reliance activities should be planned with reference to what happens in the classroom and vice versa. The oppressive social relations in the classroom should be replaced by more liberating ones. To ask this is not being very utopian; many "techniques" can be used, for example, in the genuine progressive tradition.

Manual Work Projects as Factor in Integrating School and Community. One of the objectives of self-reliance activities was to foster resourceful and dynamic relationships both within the school community and with local communities. To implement this

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<sup>7</sup>Samuel Bowles, "Cuban Education and the Revolutionary Ideology" Harvard Educational Review 41 (1971): 497.

objective in the school community, sr-committees, have been set up in every school. These are important organs for fostering community relationship within the school between students and teachers. Actually, more effort is still needed to make these committees truly operational. The factors behind the often recurring mistrust between teachers and students regarding the planning and running of sr-activities need to be explored.

On the other hand, it has been observed in this and other studies that healthy symbiotic relationships between schools and local communities are not yet an established fact. Negative experiences of school-community relationship were cited such as litigations over land ownership, thievery and lack of support of sr-projects from local suppliers and local experts. On the positive side, cooperation in adult education, shopping services and opening of day-scholars' streams in boarding schools were mentioned. However, these are incidental cases. There are no systematic attempts planned to foster the desired relationships of cooperation and sharing between schools and local communities. It is obvious then that this aspect of sr-activities still needs serious exploration. Schools ought to face the challenging question: How are we involved in the local community? Schools could organize field experiences for students to visit model production projects, offer help in adult education, keep accounts and look after nursery schools, and in-put in the planning of sr-projects could be sought from the local communities. Reciprocally, the local communities ought to face the question:

What are we doing to make schools succeed in the implementation of the policy regarding sr-activities? The local communities can be very supportive by making available the services of experts, giving special consideration to schools regarding the supply of materials, and by committed service of its members serving on the school board or on other relevant committees. As long as the autonomy of the school institution and the professionalism required to run it are respected, it should be possible to find ways, along with ideas suggested above, to foster dynamic and mutually beneficial relationship between schools and local communities. For national interest, a descriptive evaluation report by Nangwa Community Secondary School which was planned with great emphasis on school-community relationship, should be made available so that other schools can learn from the failures and successes of that experiment.<sup>8</sup>

#### Main Factors Affecting the Implementation of Self-reliance Activities

This section summarizes and discusses the implications of the findings on teachers' and parents' attitudes toward the policy and the impact of the politico-economic context of the implementation.

Teachers' Attitudes towards Manual Labor in Schools. Based on tips from teachers' behavior regarding chronic absenteeism

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<sup>8</sup>For further reading about community relation in Nangwa Community Secondary School, see Psychas, "Schools for Self-Reliance: Two Tanzanian Secondary Models", pp. 286-300.

from sr-activities, lack of effort to relate classroom and manual work activities and evaluation of sr-activities just to ensure good academic results for the school, the study did suggest that teachers' attitudes do not facilitate the successful carrying out of the policy. This observation would seem to agree with Weiler's remark regarding reforms in general:

Most analysts of efforts at educational reform around the world, in developing and developed countries alike, agree in concluding that teachers tend to form one of the most formidable obstacles to change in education.<sup>9</sup>

However, instead of blaming teachers, who generally are good people and like their students, it is imperative to explore the possible causes behind such a situation. Based on the findings of this research, three main causes have been identified.

First, the situation described above is related to the nature of top-down reforms which tend to neuterize those involved in the implementation at the bottom level. The introduction of sr-projects was such a reform to a great extent. Circulars and memos were sent from the Ministry of Education for implementation in schools. Teachers were not sufficiently sensitized and involved in decisions regarding the policy so as to internalize and consider the reform as their own. This lack of input in the planning of the reform by teachers who are such a critical group in the implementation tend to alienate teachers from the reform, to blunt their enthusiasm and stifle their creativity. At this

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<sup>9</sup>Hans N. Weiler, "Education and Development: From the Age of Innocence to the Age of Skepticism" Comparative Education 4 (October 1978): 192.

juncture, it is important to recognize the fact that memos and circulars from the Ministry of Education are not enough to ensure successful implementation unless a serious effort is made to sensitize and involve teachers who deal with students day by day. They need to be internally motivated to implement the reform. It is only internal motivation that can bolster teachers' morale and unleash their creativity which is so essential to the success of the policy.

Secondly, a shaky command of basic skills is often a cause of great anxiety among many teachers who are supposed to guide students in sr-activities. As mentioned earlier, the politico-administrative approach in introducing the reform under discussion, did not allow curricular developers to provide guidelines to assist the implementors, nor were teachers given in-service training for that purpose. The importance of a command of skills for the implementation was clearly manifested in the contrast between the confident involvement of trained teachers in certain projects (e.g., animal husbandry, poultry, etc.) and the anxiety of those teachers who did not know exactly what to do. Thus, an essential ingredient in boosting teachers' morale towards sr-activities is to equip them with a good command of basic skills. At the classroom level, they should know their material so well so that they can creatively make reference of it to what happens at the work place. At the work places, in order to have a constructive impact on students, the teachers themselves should be well grounded in basic manual skills and be

sufficiently well prepared to apply what is taught in the classroom to manual activities. This is a challenge that ought to be faced by curriculum developers and teacher training colleges.

Finally, society's reward system does not guarantee economic security for teachers and thus forces them to engage in "moonlighting" or other activities ("miradi") in order to supplement their income. Obviously, the temptation is great for teachers to misuse the time allocated for involving themselves with the students in sr-activities. Instead, they use the time to engage in activities for their own economic survival. The silent voices of the mass of secondary school teachers seem to imply this message:

We like our students and we would like to be involved with them in manual work activities. However, we and our families have to survive. We are underpaid. We can hardly make both ends meet. Society seems not to care about giving us a decent family living wage. So it is only a pragmatic solution that we use the time after classes for our private projects for survival.

Indeed, in order to enhance teachers' participation in sr-activities, it is necessary to address the question of a fair remuneration for them that will restore their sense of economic security and trust in society's recognition of their crucial contribution in molding future citizens. Economic security is an important prerequisite for teachers' self-confidence and dedication to the heavy demands of their tasks. Although the Presidential Commission made some recommendations in this regard, there is still a felt need for society to search ways of rewarding teachers in such a way that they can be relieved of

worrying about basic survival and be dedicated to the demands of their profession.<sup>10</sup>

It follows from the above discussion that instead of engaging in unproductive criticism of teachers and blaming the victims or giving their apparent negative attitude towards sr-activities a static label of "cultural opposition", it would best serve the nation and children in schools to seek ways to change the circumstances just described above for the better. This would restore teacher morale, love for their profession and dedication to all duties pertaining to the wholesome formation of future citizens. It seems that teachers do not dislike sr-activities per se, but circumstances force them to appear so. Allow teachers to be on top of things and their enthusiasm and creativity will be unleashed.

Parents' Attitude towards Manual Work in Schools. The case study did reveal that parents' negative attitude towards manual work in schools does exist. Three factors are suggested as main causes of such a situation. First, the policy is not based on realism. Students are given an orientation to manual work skills to be used after school, but there are no follow-up services, centers, or organizations to assist graduates to put their training to use. Rural values and social organization of the means of production, which have not changed much, remain an

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<sup>10</sup>United Republic of Tanzania, Recommendations of the 1982 Presidential Commission on Education as Approved by the Party and Government (Dar-es-salaam: Ministry of Education, October 1984), p. 36.

obstacle to students' creative use of their skills. Whereas the policy-makers wish the majority of graduates to go back to the rural areas and help promote development, parents and students still perceive education as a means of escaping poor conditions in the rural areas. Secondly, the poor condition of most of sr-projects in schools, has provided a pretext to parents who contend that sr-projects are a waste of their children's precious time which is badly needed for classroom work. Thirdly, a somewhat silent social-class struggle is involved in the whole issue. Well-to-do parents and bureaucrats in the desire to reproduce their social class seem to pay lip service to the policy while maneuvering to send their children to schools that put more emphasis on academic performance.<sup>11</sup> Poor parents seem to resent the policy because they perceive in it a subtle device to confine their children to the poverty of the status quo in the traditional section of the economy. They are thus determined to see to it that their children share in the fruits of the modern sector of the economy. In fact, there is still a feeling of shame when secondary school graduates remain in a village unable to find a job in the modern sector. In short, and generally speaking, the parents' aspirations are still in contradiction

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<sup>11</sup>Foster gives a warning against the hypocrisy of some African leaders in other parts of Africa: "There are only too many current examples of African leaders who extol the virtues of a truly African education designed for rural life while making every effort to send their offspring to academic Etons." See Philip J. Foster, "Education for Self-Reliance: A Critical Evaluation" in Richard Jolly, Ed., Education in Africa: Research and Action (Nairobi: East African Publishing House, 1969), p. 94.



with those of the policy-makers.

The above situation is not unique for Tanzania. Sinclair and Lillis who have made a extensive study of work-experiences programs in schools in the Third World, noted the same parents' attitudes to community schools in the Philippines, basic schools in India, rural education centers in Burkina Faso and vocational studies programmes in Sri Lanka. They make the following remark:

Policy-makers have often introduced the relevance innovation [manual work experience projects] as a way of preparing young people to enter the 'traditional' sector of the economy to remain as members of their home community and as participants alongside their parents in manual work and peasant agriculture. Pupils and their parents have, however, continued to see education as providing a ladder to prosperity, as an escape route from the subsistence economy. It is for this reason that they have been willing to make sacrifices to maintain their children in school.<sup>12</sup>

Nicholson, who has synthesized the findings of the case studies in the Caribbean regarding education and productive work programs makes similar comments about parental attitudes in this matter.<sup>13</sup>

The important implication of the above findings for the implementation of sr-activities in Tanzania is that one of the essential ingredients for the success of the program is an honest recognition of and appropriate action to change parents' negative attitudes towards sr-activities in schools. A significant degree of parental acceptance of the policy is crucial to its success. A

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<sup>12</sup>Margaret E. Sinclair & Kevin Lillis, School and Community in the Third World (London: Croom Helm in association with the Institute of Development Studies, Sussex, 1980), p. 146.

<sup>13</sup>R. M. Nicholson, "Elements of Commonality in Education and Productive Work Programmes in the Caribbean" (Undated paper found in the Department of Education, University of Dar-es-salaam, Tanzania), p. 3.

mere presentation of the program as national policy or as part of the educational philosophy of a well-respected leader does not necessarily ensure its acceptance. Concrete steps need to be taken in order to elicit parents' support of the policy.

The author would like to limit himself to five suggestions to deal with the above problem. First, there is need to recognize the role of the parents in the success of the policy. This in turn implies involving parents in the planning of projects and the opening up of communication lines between parents, policy makers and schools so as to better understand the parents' point of view. It is often wrongly presumed that educational bureaucrats know better than parents what is good for children. Secondly, steps should to be taken to set up follow-up services and resource centers to assist school graduates utilize the acquired skills for rural and urban development. Thirdly, it is opportune to launch a serious campaign to conscientize parents and villagers to be ready to welcome and assist school graduates who opt to join the traditional rather than the modern sector of the economy. Fourthly, it is imperative to ensure that in the implementation of the policy, the children from poor socioeconomic background are not victimized. Last, but not the least, honest effort ought to be made to reduce the living-standard differentials between the modern and traditional sectors. This would help both parents and students to perceive the traditional sector more favorably. Indeed, parents are not against manual work programs in schools per se, but doubt its

practical value in guaranteeing their children's social mobility and economic security for the extended family. The changes suggested above would help raise the acceptability of the policy under discussion among parents.

The Politico-Economy and Change of Attitude towards Manual Work. Under this aspect, the study explored the contradictions in the larger society which render the success of the policy extremely difficult. It was revealed that there are still social, political and economic forces in the larger society that severely handicap the efforts to bring about change or implement reforms. These findings serve to clarify the theory that the success of any educational reform does not merely depend on curricular change, well trained teachers, good school buildings and technical equipments, but that it is also dependent on the economic, political, cultural and ideological dimensions of the wider society.<sup>14</sup>

The important implication of this realization should be the adoption of a holistic approach to the implementation of the reform. Instead of merely focusing on factors internal to the school, more effort should be made to analyze and deal with factors in the larger society that militate against the policy. Such factors would include: the state of living conditions in the rural areas, attitudes towards manual work and social relations of work in all sectors of society, the degree of honesty of the

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<sup>14</sup>Ingemar Fagerlind and Lawrence J. Saha, Education and Development: A Comparative Perspective (New York: Pergamon Press, 1983), p. 155.

political and economic backing of the policy by the bureaucracy and the impact of international attitudes on division of labor on the desired reform. Although some of these factors have been peripherally mentioned by other researchers, the author would strongly propose that these issues should be central in the continuing debate regarding the implementation of the policy under study. This position is based on the relative helplessness of the school to effect social change without other reforms in other sectors of society. Levin makes the following appropriate comment in this regard:

The leverage available to the most benevolent educational reformer and policy specialist is limited by the lack of a constituency for change and the overwhelming momentum of the educational process in the direction of social reproduction of the existing polity. And, there is a deleterious result in our efforts if educational attempts to change society tend to direct attention away from the focus of the problem by creating and legitimating the ideology that schools can be used to solve problems which did not [solely] originate in the educational sector.<sup>15</sup>

The problem of negative attitudes toward manual work is not merely a problem of the educational institution, but of the whole Tanzanian society; its solution, therefore, calls for a strategy that would involve all sectors of society.

### Summary of Major Recommendations

The author strongly recommends the following points for consideration in revisiting the educational experiment of including manual work in secondary schools in Tanzania.

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<sup>15</sup>Henry Levin quoted in Michael W. Apple, Ideology and Curriculum (Boston: Routledge & Kegan Paul, 1979), p. 41.

1. Redefinition of the objectives of self-reliance activities in their order of priority and balancing society and student-centeredness.
2. Emphasis on quality rather than quantity of sr-activities.
3. Development of efficient and comprehensive procedures for assessing various sr-activities implemented in accordance with the defined objectives.
4. Setting of the production target of sr-activities by the local school board in consultation with relevant experts.
5. Schools should engage in a more serious endeavor to move from production for its own sake to a more scientific and challenging production that would motivate students.
6. Involvement of curriculum developers in providing consultancy for the planning and evaluation of sr-activities in individual schools.
7. Exploring the cross-fertilization of ideas between schools and local communities regarding sr-activities.
8. Empowerment of teachers administratively, technically and economically so as to motivate them internally to play their crucial role in the implementation of the policy.
9. Greater conscientization of parents and integration of their ideas regarding the implementation of the policy.

10. Developing a global strategy of fostering good attitude towards manual work and combatting contradictions in this respect in all sectors of society.

### Areas and Trends for further Research

In the course of the investigation of this study, some important areas were touched but could not be adequately explored due to limitations and constraints of time and funds. In this section, the author would like to suggest six areas which would provide fertile ground for further research and throw more light on the topic under investigation.

The first such area is the implementation strategy. Earlier in Chapter IV, reference to the work of Chin and Benne was made, which provides an operational categorization of strategies for social change into three groups.<sup>16</sup> The first group of strategies is that of the empirical-rational approach. This approach is based on the assumption that human beings are rational and will act to implement the policy as long as its rational justification is revealed to them either through dissemination of empirical knowledge or adoption of a dynamic utopian thinking. Tanzania's strategy to effect the educational change under investigation has some element of this group of strategies because of the emphasis on politicization and utopian thinking. The second group of

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<sup>16</sup>Robert Chin and Kenneth D. Benne, "General Strategies for Effecting Changes in Human Systems" in Warren G. Bennis, Kenneth D. Benne, Robert Chin, Kenneth E. Corey, eds., The Planning of Change (New York, Chicago, San Francisco: Holt, Rinehart and Winston, 1976, Third Edition), pp. 23-43.

strategies is of the normative-re-educative approach. Whereas the first approach stresses changes in knowledge, information or intellectual rationale for action and practice, this approach focuses on the normative culture by seeking changes in attitudes, skills and significant relationships. It is sensitive to needs, internalized habits and values of the clients of the policy in question. Except for sr-committees that provide students the opportunity to express their feelings about policy practices, the Tanzanian attempt does not seem to provide a good example for this approach of strategies. The third category of strategies relates to the power-coercive approach. It applies to either an authoritarian (political-ideological) or coercive power (legitimate or not) to effect policy change. This is essentially a top-down approach and is characterized by lack of open criticism. Based on observations of this study, the Tanzanian approach resembles significantly this third group of strategies. One is stunned by a certain unquestioning compliance of those with less power (principals, teachers, students in schools) to the plans, directions and leadership of those with greater power (in the Ministry of Education).

In short, the implementation strategy operating in Tanzania seems to be a vague combination of some elements from all the three groups of approaches mentioned above. Hence, there is a need for further research to investigate, define and explore the strengths and weaknesses of these elements from the three approaches that are at work in the Tanzanian experience.

The second area that calls for special attention of researchers relates to the investigation and evaluation of efforts to correlate classroom and manual work. There is a concern using sr-activities to merge theory and practice but no detailed description or evaluative information is available regarding the efforts and problems involved in this endeavor. Research on this topic would generate valuable information to policy makers, curriculum developers and teachers involved in teaching.

In the presentation of the findings, the controversial nature of assessment procedures of sr-activities at the school, at the Ministry of Education and National Examination Council levels was mentioned. This is the third area of concern that demands the attention of educational researchers in Tanzania. Such an investigation would focus on the actual assessment practices vis-a-vis the important objective of moving away from examination-oriented or merely production-oriented to education-oriented assessment of sr-activities.

The fourth area that calls for more research is the clarification of the differences and comparison of benefits of sr-activities and vocationalization approaches to the inclusion of productive labor in the curriculum. This study has pointed out the confusion that is manifested in the implementation of these two educational reforms whose objectives are taken for granted as the same. Research in this area would help clarify the underlying logistical and philosophical problems.



Education management in Tanzania is characterized by centralization, technocratic orientation and minimal input from the grassroots.<sup>17</sup> This situation suggests the fifth important area for research. An investigation of parents' and the public's views in general regarding the policy in question would be a great contribution for either its legitimization or modification. This is especially needed in the 1980s, when, as suggested by Samoff's findings, the social demand has superseded the manpower dynamic in Tanzanian educational expansion.<sup>18</sup> Thus, the views and sensitivities of local communities, hitherto mentioned in passing, should be researched and taken into account.

Last, but not least, the author would suggest two badly needed methodological trends in Tanzanian educational research. First, instead of global, quantitative research that generalizes on ESR, sr-activities or vocationalization, a shift is needed to qualitative, indepth, objective-oriented research that would focus on each objective of the reform. Such research would generate more useful information to implementors. Secondly, with due respect to the importance of academic research, there is urgency for more policy-oriented research that would influence policy makers and contribute to making a difference in Tanzanian

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<sup>17</sup>Comments on centralized planning versus local autonomy in Tanzanian educational development can be found in Joel Samoff, "School Expansion in Tanzania: Private Initiatives and Public Policy" Comparative Education Review 31 (August 1987): 353-354.

<sup>18</sup>Ibid., p. 341.

educational reality. It is often voiced that most of academic research ends up gathering dust in the library bookshelves. The suggested trend could help remedy the situation.

### Beyond Romanticism

The specific objective of this study was a descriptive evaluation of sr-activities or the inclusion of manual work in the secondary school curriculum. On a positive note, the study revealed a general popular appreciation of the efforts to move away from a purely academic curriculum to a more practical one. One cannot but give credit to the bold attempts undertaken by Tanzania in this regard. However, the study did also uncover signs of underimplementation and mis-implementation of the reform in question. Possible causes of this include political romanticism, the immensity of the venture and the lack of adequate assessment of both resources (human and material) and the politico-economic context (national and international) that impinge on the implementation of the policy.

The practical suggestion therefore that emerges from the study is that in the second phase of national development ("Awamu ya Pili"), Tanzanian educational policy makers and planners must go beyond political and ideological romanticism in order to deal with real educational issues that have been raised. In so doing, the key problem is that of choice. As Nyerere has so aptly put it: "We have to make choices between good things, not between

good things and bad things: to plan means to choose."<sup>19</sup> Now, given the scarcity of resources, the urgency to re-emphasize basic academic skills so essential for catching up with the competitive technological world, the controversial nature of both educational and economic returns of vocationalization, and the preponderance of social over human resource demand in educational development -- would it not be a better strategy to opt for concentrating on, trimming down, perfecting and rationalizing sr-activities and programs which would be less job-oriented and yet effective in initiating students into the appreciation of manual work as a worthwhile and rewarding form of life? This question is the focus of this study in the on-going searching debate by Tanzanians for a more relevant and critical educational system which is a vital part of the larger struggle for liberation and development.

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<sup>19</sup>Julius K. Nyerere, Freedom and Development: Uhuru na Maendeleo (London, Oxford, New York: Oxford University Press, 1974), p. 84.

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## APPENDIX A

## APPENDIX A

## The Musoma Resolutions on Education

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University education is actually adult education.

TANU Direction on the Implementation of Education for Self-Reliance, November, 1974.

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Seven years after the promulgation of the policy of Education for Self-Reliance, the National Executive Committee (NEC) of TANU in its meeting in Musoma in November 1974, made an appraisal of the extent to which the policy was being implemented in Tanzania. The Committee then proceeded to formulate some specific directives, popularly known as the 'Musoma Resolutions', on how Education for Self-Reliance could be implemented. For, by 1974 it had become quite apparent that while a certain degree of success was achieved, there was still much to be desired. As the National Executive Committee noted,

It is recognized that the process of changing completely an established system of education necessarily takes a long time before the results can be seen. . . . Nevertheless we must accept that most of our objectives have not been achieved. We certainly have not liberated ourselves from the inappropriate system of education which we inherited (TANU, 1974b:3).

As far as adult education is concerned, some of the Musoma Resolutions have served to inject more strength and confidence into the adult education movement in Tanzania, while at the same time the adult education movement itself has been a source of inspiration in the formulation of some of the resolutions as will be analysed in this chapter.

In order to understand the purpose and objectives of the Musoma Resolutions, it is worthwhile to make a brief resume of what the policy of Education for Self-Reliance had set out to achieve as deliberated by the NEC meeting.

1. Primary education ought to be self-sufficient and relevant and should not merely constitute a preparation for entry into secondary schools since the vast majority of Tanzania primary school graduates would not

have a chance to go to secondary schools.

2. Similarly, secondary education should be complete in itself instead of being a mere preparation for joining the University or other institutions of higher learning.
3. Education provided in schools should justifiably be for the benefit of the masses.
4. All students should participate in communal productive activities as part of their normal training during their school days in order to produce goods, including food, which will be used by the school and the nation at large.
5. The paper credentials of the formal schooling system should not be looked upon as being synonymous with education and they should not be treated as the only criterion for assessing a person's competence and ability for a job.

The appropriate implementation of the policy of Education for Self-Reliance had faced a number of constraints and problems. The NEC meeting identified three main constraints:

1. The orientation of some people in Tanzania was still pegged to a lingering concern for 'international standards.' '. . . we have not succeeded in liberating ourselves mentally, nor in having self-confidence nor in selecting that which is most suitable to our objective conditions instead of continuing to ape the systems of other peoples whose economy and mode of life is totally different from ours' (TANU, 1974b:4).
2. There seemed to be a general failure in [transforming the schools into productive units, so that they become part of the economic set up, in other words, making students appreciate their obligation of being productive through agriculture and, by other means, for their own benefit and that of their school.]
3. The tendency of giving more esteem to someone who had acquired higher education was still prevalent. Formal educational qualifications still played a major role in determining a person's suitability for employment in government service and in determining his salary scales. Similarly, admission to the University was being controlled on the basis on the students' performance in the National Form Six Examination.

In order to rectify such a situation, and hence in order to achieve the ultimate objectives of Education for Self-Reliance, the NEC meeting formulated four main Directives on its implementation:

1. Within three years, by 1977, Tanzania must achieve Universal Primary Education (UPE) -- that is, 12 years ahead of the original target.
2. Students completing Form Six of secondary education will have to work and gain practical experience for a number of years before they will be considered to pursue university studies.
3. Productive work must be an integral part of education in all schools and other educational institutions.
4. The excessive emphasis placed on written examinations must be reduced and students must be continually assessed on the basis of their progress in the classroom combined with their performance of other functions and the work component of their studies.

There are important and significant relationships between these Directives and the adult education revolution.

To achieve Universal Primary Education within a period of three years ending in 1977 and 12 years ahead of the formerly determined target is obviously an enormous and revolutionary task which cannot possibly be carried out without instituting radical changes in the existing organization and operation of the primary education system. Such a bold decision owes its inspiration to the success of the National Literacy Campaign which in 1974 was in its third year. For by 1974, the National Literacy Campaign had managed to enrol more than 3 1/2 million learners. As noted by the NEC meeting:

It is clear that the tremendous successes which have been achieved in our adult education programmes have been brought about by the use of revolutionary techniques in the implementation of those programmes (TANU, 1974b:6).

The revolutionary methods used in carrying out adult education on this mass scale, covered such aspects as the organizational and committee structures, mobilizational methods, strategies used in recruiting and training teachers, maximizing the use of all existing resources, and production of study materials -- all within a pragmatic, innovative and adaptive framework. In achieving Universal Primary Education, therefore, the traditional and rigid considerations of logistics and economics could be underplayed, and the pioneering footsteps of the National Literacy Campaign could be followed.

The abolition of direct admission of Form Six graduates into the University has broken the traditional hierarchical structure

of formal education. It has further transformed the University of Dar es Salaam into an adult education institution since all the students who are now admitted are working adults. Before Form Six leavers are considered for university education, they have to work for a number of years after which they have to obtain recommendations from their respective employers and TANU Branches regarding their work competence, character, and other abilities and attitudes. Such a procedure of admission into the University can be seen as an attempt to make higher education more meaningful and productive by offering it to working adults who have accumulated a reservoir of varied experiences. It can also be seen as an attempt to downgrade the importance of the paper qualifications of formal education; the purely academic ability to pass examinations in formal education is no longer the only criterion in selecting people for higher education. Such an action will, over time, contribute in enhancing and upgrading the value and importance of non-formal and adult education.

The Directives on integrating work with education and reducing the excessive emphasis on written examinations are in conformity with some of the most common characteristics of non-formal education.

Source: Yusuf O. Kassam, The Adult Education Revolution in Tanzania (Nairobi: Shungwaya Publishers Ltd., 1978), pp. 100-104. The section in brackets is taken from a reprint of the directive in African Review 6 (1, 1976): 105.

## **APPENDIX B**



## APPENDIX B

Ministry of Education  
Circular on  
Education for Self-Reliance (22 July 1967)

MINISTRY OF EDUCATION,  
P. O. Box 9121,  
DAR ES SALAAM.

Ref. No. EDS.R6/1/1/1.

22nd November, 1967.

To: All Heads of Secondary Schools.

The Principal, Dar es Salaam Technical College.

Education for Self-Reliance

It is now seven months since the meeting of Heads of Secondary Schools at University College, Dar es Salaam to discuss the implementation of the policy of Education for Self Reliance. At this conference many suggestions were put forward by which schools could help themselves by initiating projects aimed at making pupils aware of their responsibilities to the community and the nation. Most schools have entered wholeheartedly into these projects and moreover, are actively investigating other ways of becoming Self Reliant.

2. So that this Ministry may have an accurate picture of the projects under way, and at the same time pass on the experience of schools, it has been decided that all schools will submit a termly report on their own self help projects. These reports should contain a description of projects already started together with an assessment of their effectiveness, and an outline of any proposed projects for the future. Details of any financial outlay or gain should also be indicated.

3. Your first report, covering the period April - December 1967 should reach this office before the end of the year. Subsequent reports should be sent at the end of each term.

(Signed)  
Assistant Chief Education Officer  
(Secondary and Technical)

Copies to: Regional Commissioners.  
Regional Education Officers.

## APPENDIX C

## APPENDIX C

MADHUMUNI NA MALENGO YA ELIMU YA SEKONDARI  
[AIMS AND OBJECTIVES OF SECONDARY EDUCATION]

A. MADHUMUNI YA ELIMU KWA UJUMLA

Madhumuni ya elimu kwa ujumla ni kuwaandaa Watanzania kwa kazi ambazo wanahitajika kufanya katika jamii ya kitanzania ambayo kwa wakati huu sehemu kubwa ni ya wakulima waishio vijijini. Kwa hiyo, elimu lazima itoe maarifa (knowledge) ujuzi (skills) wa kutosha na ijenge tabia (attitude) ambayo itamuwezesha mwanafunzi kushiriki kikamilifu katika shughuli za maendeleo ya jamii ya kijamaa.

B. MADHUMUNI NA MALENGO YA ELIMU YA SEKONDARI: KIDATO CHA 1 - 4

1. Madhumuni na malengo ya Elimu ya Sekondari ni kumpatia mwanafunzi elimu nzuri ya kawaida ya sekondari (a good general Secondary Education) pamoja na ujuzi fulani wa kazi. Mpangilio wa masomo ya sekondari unampa kila mwanafunzi nafasi ya kupata elimu ya kawaida ya sekondari (Basic Secondary Education) kwa kusoma masomo ya lazima yafuatayo: Siasa, Kiswahili, Kiingereza, Historia, Jiografia, Hisabati, Biolojia, Kemia, Fizikia pamoja na somo la ujuzi wa kazi ama Biashara, Kilimo, Sayansi Kimu au Ufundi.

2. Madhumuni ya Elimu ya Sekondari ni kuwaandaa Watanzania watakaoweza kufanya kazi katika sekta mbali za uchumi na maendeleo ya Taifa ambazo zinahitaji elimu ya sekondari.

3. Wanafunzi wamalizapo elimu ya sekondari ya kidato cha nne, baadhi watachaguliwa kuendelea na masomo katika kidato cha tano, Vyuo vya ufundi na vya ualimu, na wengine watachaguliwa kuchukua kozi au kazi mbali mbali kulingana na mahitaji ya Taifa. Baadhi ya wanafunzi watajiunga katika sekta ya binafsi (private sector). Baadhi ya wanafunzi watatumia ujuzi waliopata kwa kufanya kazi au kuendesha miradi itayowawezesha kujitegemea.

4. Masomo ya ujuzi wa kazi, yaani, Kilimo, Ufundi, Biashara au Sayansi Kimu yatamsaidia mwanafunzi katika maisha yake hata kama hatakwenda kusomea kazi hiyo baada ya kumaliza masomo ya sekondari. Vile vile masomo hayo ya ujuzi wa kazi husaidia katika kumfanya mwanafunzi awe na mtazamo mzuri (attitude) kuhusu kazi.

5. Masomo ya kawaida na ya ujuzi wa kazi yatolewayo katika ngazi ya elimu ya sekondari kidato cha kwanza hadi cha nne pia yana lengo la kuwaandaa wanafunzi watakaoweza kuendelea na masomo ya

kidato cha tano na Vyuo vya Ufundi ili waweze kusoma masomo mbalimbali (subject Combinations) zitolewazo katika ngazi ya elimu ya sekondari ya kidato cha tano na sita na Vyuo vya Ufundi. Masomo hayo ni:

- |  |         |
|--|---------|
| 1. History, Geography, Economics             | (HGE)   |
| 2. History, Geography, English Language      | (HGL)   |
| 3. History, Geography, Kiswahili             | (HGK)   |
| 4. Economics, Geography, Mathematics         | (EGM)   |
| 5. History, Kiswahili, French                | (HKF)   |
| 6. Kiswahili, English Language, French       | (KEF)   |
| 7. Economics, Commerce, Accountancy          | (ECA)   |
| 8. History, Geography, Education             | (HGEEd) |
| 9. Kiswahili, English Language, Education    | (KLEd)  |
| 10. Commerce, Accountancy, Education         | (CAEd)  |
| 11. Physics, Chemistry, Mathematics          | (PCM)   |
| 12. Physics, Chemistry, Biology              | (PCB)   |
| 13. Chemistry, Biology, Geography            | (CBG)   |
| 14. Physics, Geography, Mathematics          | (PGM)   |
| 15. Chemistry, Biology, Military Knowledge   | (CBMi)  |
| 16. Physics, Mathematics, Military Knowledge | (PMMi)  |
| 17. Physics, Mathematics, Electronics        | (PMEl)  |
| 18. Chemistry, Biology, Agriculture          | (CBA)   |
| 19. Physics, Chemistry, Education            | (PCEd)  |
| 20. Physics, Mathematics, Education          | (PMEd)  |
| 21. Chemistry, Mathematics, Education        | (CMEd)  |
| 22. Chemistry, Biology, Education            | (CBEd)  |
| 23. Physics, Geography, Education            | (PGEd)  |
| 24. Agriculture, Chemistry, Education        | (ACEd)  |
| 25. Nutrition, Biology, Education            | (NBEd)  |
| 26. Textile, Chemistry, Education            | (TCEd)  |
| 27. Civil, Engineering                       |         |
| 28. Mechanical, Engineering                  |         |
| 29. Electrical, Engineering                  |         |
| 30. Telecommunication, Engineering           |         |
| 31. Automobile, Engineering                  |         |
| 32. Laboratory Technology                    |         |

#### C. MADHUMUNI NA MALENGO YA MASOMO YA UJUZI WA KAZI

##### I. Biashara

##### Madhumuni na malengo

1. Wanafunzi waweze kutumia maarifa na ujuzi wa Uhasibu ili waweze kutunza Vitabu vya Mahesabu (Accounting books) vya Mashirika, Vilabu (Non trading Organizations), Serikali, Vyama vya Ushirika na watu binafsi wenye biashara ndogo kama maduka n.k. wakifanya kazi kama wahasibu wasaidizi daraja la pili.

2. Kwa kutumia maarifa na ujuzi wa masomo ya biashara

wanafunzi waweze kutunza vitabu vya mauzo na ununuzi (Purchases and sales books) Cash Book, Vote Book, Imprest Book na kuandika Payment Voucher na hundi. Pia waweze kutengeneza, Bank Reconciliation Statements, Hesabu za faida na Hasara, Balance Sheet, Hesabu za Vyama visivyo vya Biashara, Hesabu za kuunda (Manufacturing Accounts) na kufanya ukaguzi wa Usahihi wa malipo.

3. Wanafunzi waweze kutumia maarifa na ujuzi katika kutaipu na mbinu za ofisi ili waweze kutunza vifaa vya ofisi na nyaraka. Pia waweze kufanya kazi kama wapiga taipu daraja la kwanza.

4. Wanafunzi waweze kutumia maarifa waliyopata kwa kujiendeleza katika masomo ya juu ya utaalamu katika Vyuo vya Uhasibu, Ushirika, Uhazili na kidato cha tano.

5. Wanafunzi waweze kutumia maarifa na ujuzi waliopata kwa kufanya kazi za kujitegemea wenyewe.

## II. Kilimo:

### (a) Madhumuni

1. Kuwapa wanafunzi maarifa na ujuzi wa msingi wa elimu ya Kilimo kinadharia na kimatendo kwa kutoa ujuzi unaohitajika kwa wataalam wa Kilimo kwa ngazi za mwanzo au mkulima stadi. Ujuzi wapatao unalingana na ujuzi wa ngazi ya msaidizi wa Kilimo (Agricultural Field Auxilliary) ambaye ni sawa na Msaidizi wa "Afisa Kilimo Msaidizi (Agricultural Field Assistant)" au mkulima stadi mwenye ujuzi wa mbinu za kilimo za kumuwezesha kuendesha miradi ya kilimo cha mazao au mifugo.

2. Kuwaandaa wanafunzi kwa elimu ya juu katika utaalam wa masomo ya kilimo. Maandalio haya yatarahisisha na kuimarisha mafunzo ya Afisa Kilimo Wasaidizi (Agricultural Field Assistant), katika M.A.T.I., kwa mfumo wa mafunzo ya mazao na mifugo kwa pamoja, pia mafunzo mengineyo ya Kilimo.

### (b) Malengo

3. Kuwawezesha wanafunzi kufanya kazi kiushirika na kuamini kuwa kilimo ni sehemu ya maisha yao shuleni na baada ya shule na kuziwezesha shule kuzalisha mali kwa kutumia ujuzi wa kilimo kutegemeana na rasilimali (resources) ilivyo.

4. Kuwawezesha wanafunzi kutekeleza kanuni

(principles) na mbinu (techniques) muhimu zinazotumika katika uzalishaji mali kwa miradi ya mazao na mifugo.

5. Kuwawezesha wanafunzi kutambua, kutumia na kutunza mitambo na vifaa muhimu kwa kilimo, kwa mfano 'ox-plough', trekta na vifaa vidogo vidogo vya kilimo kama vile vyombo vya kunyweshea maji na kulishia kuku, nyumba za nguruwe n.k. na kuwawezesha kuzuia mmomonyoko wa udongo na kutumia njia rahisi za kumwagilia maji mashambani (Small holder irrigation).

6. Kuwawezesha wanafunzi kuchagua, kupanga na kutekeleza miradi ya kilimo, na kuwawezesha kuweka takwimu za miradi hiyo.

7. Kuwawezesha wanafunzi kujua umuhimu na uhusiano uliopo kati ya huduma za kilimo zitolewazo na Wizara ya Kilimo na Maendeleo na Mifugo kwa wakulima na utafiti unaofanyika katika vituo vya TARO na TALIRO, na kuwawezesha kutumia na kusambaza habari kuhusu mbinu mpya za ukulima bora zinazoshauriwa kulingana na mazingira.

### III. Sayansi Kimu.

Madhumuni na malengo

1. Kuwapa wanafunzi ujuzi na maarifa yatakayowawezesha kuinua hali yao ya maisha, kuwafanya waweze kukuza jamii zao vizuri, kutumia muda wao kwa manufaa yao na ya jamii kwa kutumia raslimali (resources) zinazopatikana katika mazingira yao.

2. Kuwawezesha wanafunzi kutambua na kuweza kuyatimiza mahitaji ya familia zao yanayohusu Chakula na Lishe, vitambaa na nguo, nyumba na utunzaji wake ili waweze kukidhi mahitaji hayo.

3. Kuwapa wanafunzi maarifa na ujuzi ili waweze kujitegemea kiuchumi vijijini na mijini kwa kuendesha biashara za upikaji na uuzaji wa vyakula, ushonaji wa nguo, utengenezaji wa mapambo ya nyumbani na utunzaji wa watoto katika vituo vya watoto wadogo.

4. Kuwapa wanafunzi msingi imara wa masomo ya Sayansi Kimu ili wale watakaokuwa na uwezo wa kujiendeleza katika vipengele mbali mbali vya masomo haya baada ya kumaliza kidato cha Nne waweze kumudu ipasavyo.

#### IV. Ufundi

##### (a) Madhumuni

1. Kuwapa wanafunzi maarifa na ujuzi utakao wawezesha kufanya kazi kama fundi stadi daraja la III katika ujenzi, mitambo na umeme.

2. Kuwaandaa wanafunzi kwa masomo ya juu katika Vyuo vya Ufundi.

##### (b) Malengo ya Jumla kwa fani za ujenzi, mitambo na umeme:

1. Wanafunzi wajue na waweze kuchagua, kutumia na kutunza vifaa mbali mbali vya kifundi.

2. Wanafunzi waweze kukadiria idadi ya vifaa gharama ya vifaa na gharama za utumishi katika kazi inayohusika.

3. Wanafunzi waweze kuchora na kusoma michoro mbali mbali ya ufundi wa kawaida.

##### (c) Malengo ya fani ya Ujenzi:

##### 1. Uashi:

(i) Wanafunzi waweze kupima na kujenga nyumba ndogo yenye paa la kuezeka pamoja na kujenga mashimo ya maji machafu (cesspit and septic tank).

(ii) Wanafunzi waweze kutengeneza matofali ya aina mbali mbali.

##### 2. Useremala:

(i) Wanafunzi waweze kupaua na kuezeka na kuweka dari nyumba ndogo.

(ii) Wanafunzi waweze kutengeneza fanicha, milango na madirisha ya kawaida ya nyumba ndogo, kwa mfano "button doors" na "flush doors".

##### 3. Ufundi Bomba:

(i) Wanafunzi waweze kuweka mabomba ya maji safi na maji machafu katika nyumba ndogo ya kawaida na kuyatengeneza inapotokea uharibifu.

(ii) Wanafunzi waweze kuweka vifaa mbali mbali vinavyo-husiana na maji safi na maji machafu kwa mfano 'showers', 'sink', n.k.

#### 4. Ufundi Rangi

(i) Wanafunzi waweze kutayarisha sehemu mbali mbali kabla ya kupaka rangi kwa 'brush' na kwa kunyunyiza (Spraying).

(ii) Wanafunzi waweze kupaka rangi inavyotakiwa.

(iii) Wanafunzi waweze kuandaa na kuandika maandishi mbali mbali kwa kutumia herufi za kawaida.

#### (d) Malengo ya fani ya Mitambo na magari:

##### 1. Ufundi magari

(i) Wanafunzi waweze kurekebisha gurudumu za gari (wheel alignment and balancing) na kuziba pancha.

(ii) Wanafunzi waweze kurekebisha na kubadilisha 'brake'.

(iii) Wanafunzi waweze kupima na kuchaji 'battery'.

(iv) Wanafunzi waweze kubadilisha mafuta ya 'engine' na 'gear box' pamoja na kupiga 'grease'.

(v) Wanafunzi wajue na waweze kurekebisha matatizo yatokanayo na mfumo wa 'ignition' kwa mfano 'plugs', 'starter' n.k.

(vi) Wanafunzi wajue na waweze kurekebisha matatizo ya kawaida ya mfumo wa fueli ya gari kwa mfano kusafisha 'air cleaner', 'carburetor', n.k.

##### 2. Ukerezaji na Uchongaji wa vyuma:

(i) Wanafunzi waweze kutumia vifaa kama 'micrometer' 'venier clipers' n.k. kwa kupima vitu vinavyohitaji usahihi zaidi.

(ii) Wanafunzi waweze kuchonga vifaa na vipuri vidogo vidogo kama 'bolts', 'spanners' 'nuts', 'washers', n.k. kwa ajili ya mitambo



mbali mbali.

3. Uungaji na Uyeyushaji Vyuma:  
(Welding Sheet Metal and Foundry)

(i) Wanafunzi waweze kutengeneza vifaa vya bati bamba kama vile ndoo mapipa ya taka n.k. kwa kutumia risasi (soldering) na kwa kuchomea kwa 'gas'.

(ii) Wanafunzi waweze kuunga vyuma visivyohitaji utaalam maalum kwa kutumia umeme (arc welding).

(e) Ufundi Umeme:

1. Electrical Installation:

(i) Wanafunzi waweze kufunga waya za umeme pamoja na vifaa vinavyohitajika katika nyumba ya kawaida na kufanya matengenezo yanayotokana na hitilafu za umeme.

(ii) Wanafunzi waweze kutengeneza (repair) vifaa mbali mbali vya nyumbani vyenye kutumia umeme kwa mfano pasi, birika, jiko la umeme, fan n.k.

(iii) Wanafunzi waweze kubadilisha waya za gari.

2. Auto-electrics:

Wanafunzi wajue na waweze kurekebisha mata-tizo yatokanayo na mfumo wa 'ignition' kwa mfano kurepea 'starter', 'alternator' n.k. na pia waweze kurekebisha taa za gari.

3. Radio Repair:

Wanafunzi waweze kuripea radio zenye hitilafu za kawaida pamoja na kuripea hitilafu za kawaida za vifaa vingine vya 'electronics'.

Source: Department of Secondary Education, Ministry of Education, Circular on: Aims and Objectives of Secondary Education (July, 1985). (Mimeographed.)

English Translation of  
Madhumuni na Malengo ya Elimu ya Sekondari

AIMS AND OBJECTIVES AND OBJECTIVES OF SECONDARY EDUCATION

A. GENERAL AIMS OF EDUCATION

The aims of education in general are to prepare the Tanzanians for the functions they are required to perform in the Tanzanian society which, for the present time, is predominantly agricultural and rural. Education therefore has to combine knowledge and skills in order to form the attitudes of the students which will serve as the basis for their full participation in the national building of the socialist society.

B. AIMS AND OBJECTIVES OF SECONDARY EDUCATION: FORMS 1 - 4

1. The aims and objectives of Secondary Education are to enable the students to acquire a good general Secondary Education together with some technical skills. The curriculum of the secondary education is geared to offer every student the Basic Secondary Education which is composed of the following subjects: Political Education, Kiswahili, English, History, Geography, Mathematics, Biology, Chemistry, Physics, and in addition, Commerce, Agriculture, Home Economics (Domestic Science), and Technology.

2. The aims of the Secondary Education are to prepare the Tanzanians for employment in various sectors of the economy and development that require secondary education.

3. From among the Secondary School graduates, will be selected a number of students who will continue with Form V, Technical Colleges, and Teachers' Training Colleges; others will be chosen to take courses or be employed to meet the actual needs in the nation. Some of the graduates will join the private sector; and some will apply the education they acquired to launch their own private and self-reliant projects.

4. The technical subjects: agriculture, trade, commerce or domestic science will enable the student to live a good life in the future, even if the student has no opportunity to pursue further training after the secondary school. Furthermore, the technical training helps to shape the student's attitude as regards to work.

5. The ordinary subjects as well as the skills of the secondary school curriculum from Form I - IV, are aimed at preparing the students for a higher level and a more complicated subject combination as they pursue further training in Form V and VI and other technical colleges.

The subjects are as follows:

- |   |       |
|---|-------|
| 1. History, Geography, Economics        | (HGE) |
| 2. History, Geography, English Language | (GHL) |
| etc. . . .                              |       |

## C. AIMS AND OBJECTIVES OF SKILL-ORIENTED SUBJECTS

### I. Commerce

#### Aims and Objectives

1. That the students, as assistant accountants of the second grade level, are able to apply the Accountancy knowledge and skills to keep accounting books of the Corporations (Non trading Organizations), the Government, Cooperative Unions and Private small businesses such as stores, etc.

2. The students should be able to apply accounting knowledge and skills to keep Purchasing and sales books, Cash Books, Imprest books, and be able to write Payment Voucher and checks. They should also be able to prepare Bank Reconciliation Statements, Profit and Loss Statements, Balance Sheets, Accounts for Non-profit Organizations, Manufacturing Accounts and Auditing.

3. The students should apply their knowledge and experience of typing and office skills to handle office equipments and records. When employed, their skills should be at the level of the first grade typing.

4. The students should, with the knowledge they have acquired, pursue further studies in Colleges of Accountancy, Cooperatives, Secretarial Colleges and Form V.

5. The students should apply their knowledge and skills to self-help projects.

## II AGRICULTURE

### (a) Aims

1. To introduce the students to the basic theoretical and practical agricultural knowledge and skills by offering them the courses required for the experts of the first grade level or for the experienced farmer. The practical experience they get is equivalent to that of the Agricultural Field Auxiliary who in turn is comparable to the Agricultural Field Assistant or to the experienced farmer who is conversant with agricultural techniques which enable him to manage his farm of crops and the rearing of animals.

2. To prepare the students for the advanced training in agriculture. This preparation will facilitate and supplement the training of the Agricultural Field Assistant in the M.A.T.I., by combining the courses on crops and animals together with other general courses in agriculture.

(b) Objectives

3. To enable the students to work in cooperation with others and to instill in them the belief that agriculture is a part of the school curriculum and will be an integral part of their lives thereafter, and to enable the schools to produce goods by utilizing agricultural skills and the resources at hand.

4. To enable the students to put into practice important principles and techniques that are the bases for crop production projects and animal husbandry.

5. To enable the student to identify, use and maintain the equipments, and important farm implements, for example, the ox-plough, tractors and other small farm tools such as those used in poultry raising, farming, as water jars and . . . , pig sheds, etc., students should be shown how to manage and prevent soil erosion and the simple method to use small holder irrigation.

6. To enable students to chose, plan and implement agricultural projects and to enable them to keep statistics on those projects.

7. Students should know the importance and the existing relationship between the Ministry of Agriculture and Animal Farmers' Development and the on-going research in TARO and TALIRO centers, and to enable them to spread the new about the new agricultural techniques designed for various environments.

### III DOMESTIC SCIENCE (HOME ECONOMICS)

Aims and Objectives:

1. To give the students knowledge that will enable them to improve their quality of life, to raise well their families, to utilize their lifetime for their own advantage by exploiting the resources available in their surroundings.

2. To enable the students, in meeting the needs of their families, to pick and choose items according to quality, such as food according to its nutritional value, clothing according to the quality of its material, and housing as far as it can meet the family's needs.

3. To provide the students with the knowledge and skills of

for example, hotel and catering business, tailoring, carpentry, and the running of day-care centers: these will enable them to be financially independent in both rural and urban settings.

4. The students should be taught good basic courses as a firm foundation for those students who wish to specialize in various fields of Domestic Science (Home Economics), after they have completed their secondary education.

#### IV TECHNOLOGY

##### (A) aims:

1. To give the students knowledge and skills that will enable them to operate as technicians, grade III, in construction work, mechanical and electro engineering.

2. To prepare the students for higher courses in Technical Colleges.

(b) General aims of the masonry, mechanical and elctro engineering department.

1. The students should be able to pick out proper tools, use and maintain them.

2. They should be taught how to estimate the operational and service cost of a particular project.

3. The students should be able to draw, read and interpret ordinary and simple technical designs.

(c) The objectives of (the department/subject of) construction work.

##### 1. Masonry:

(i) The students should be able to draw the plan of and build small thatched houses with drainage together with cesspit and sceptic tanks.

(II) The students should be able to make various types of bricks.

##### 2. Carpentry:

(i) The students should know how to manage all stages of a small house roof construction: crossing poles and fixing rafters, thatching and constructing the ceiling.

(ii) The students should know how to make furniture and

ordinary doors and windows of a small house, such as button and flush doors.

### 3. Plumbing:

(i) The students should know how to install water pipes and sewer lines in ordinary small houses and to repair them when necessary.

(ii) They should also be able to install all water faucets, taps, showers, sinks, etc.

### 4. Painting:

(i) The students should be able to prepare those areas before they are brush painted or sprayed.

(ii) They should be able to distinguish various kinds of paints and choose the appropriate ones.

(iii) They should also be able to prepare and print (write) in all sorts of styles by using ordinary characters.

### (d) Objectives of automotive engineering courses:

#### 1. Auto Mechanics

(i) The students should learn wheel alignment and balancing and repairing of tire punctures.

(ii) They should be able to assemble and replace brakes.

(iii) They should be able to know how to charge batteries and read the gauge.

(iv) They should know how to change engine and gear box oil and greasing.

(v) The students should know and be able to repair any mechanical problems in the ignition system such as plugs and starter, etc.

(vi) They are expected to know the maintenance of the fuel system such as cleaning the air filter and carburetor, etc.

#### 2. Lathing and Iron Cutting:

(i) The students should be able to handle tools such as micrometer and vernier clippers in cases where more accurate measurements are needed.

(ii) They should be able to cut/manufacture small tools and equipments like bolts, spanners, nuts washers, etc., for various machines.

### 3. Welding Sheet Metal and Foundry

(i) The students should be able to manufacture tin ware utensils such as small garbage casks, buckets by soldering and hot gas.

(ii) The students should be able to use arc welding in simple matters where sophisticated skills are not needed.

### (e) Electrical Engineering

#### 1. Electrical Installation:

(i) The students should be able to do all what is necessary for wiring a simple family house and repair any electric malfunction that may arise.

(ii) The students should be able to repair domestic utensils and appliances such as the electric iron, kettle, stove, etc.

(iii) They should also be able to maintain, change and replace motor vehicle electrical wiring.

#### 2. Auto-electric:

The students should be able to detect and rectify any malfunction arising in the ignition system, as for example, the starter, alternator, etc., as well as the lighting system.

#### 3. Radio Repair:

The students should be able to handle simple repairs of the radios that are out of order as well as simple electronic equipments.

## APPENDIX D



## APPENDIX D

LETTER OF RESEARCH CLEARANCE FROM THE  
MINISTRY OF NATIONAL EDUCATIONJAMHURI YA MUUNGANO WA TANZANIA  
[United Republic of Tanzania]  
WIZARA YA ELIMU  
[Ministry of Education]Sanduku La Posta 9121  
Dar es Salaam.  
10 Januari, 1986

Kumbukumbu Nambari EDI.A3/10/RP/5

Fr. Peter M. Rutayongororwa,  
St. Joseph's Cathedral,  
P. O. Box 167,  
Dar es Salaam.Re: RESEARCH CLEARANCE

I am pleased to inform you that the Ministry of Education has granted you permission to conduct the research titled "Education for Self Reliance and the Inclusion of Manual Work in the Secondary School Curriculum: The Case of Tanzania since the Musoma Resolution of 1974" in Forodhani Secondary School (for pre-testing the instruments), Ihungo, Rugambwa, Nyakato, Bukoba, and Kahororo Secondary Schools.

By copy of this letter the Headmasters and Headmistresses are requested to facilitate the research environment in their respective schools and to give you all the assistance you might need.

Dr. F. B. Mukyanuzi of UTE would assist you in securing relevant records and documents for your consultation at the Ministry.

The Ministry would like a copy of your dissertation once you have completed your program. We wish you every success in your field work.

Yours sincerely,

(Signed) Mrs. B. T. Seif  
for PRINCIPAL SECRETARY

EDI.A3/10/RP/5 (Cont'd.)

- |       |    |                            |
|-------|----|----------------------------|
| c. c. | 1. | Forodhani Secondary School |
| "     | 2. | Ihungo Secondary School    |
| "     | 3. | Rugambwa Secondary School  |
| "     | 4. | Nyakato Secondary School   |
| "     | 5. | Bukoba Secondary School    |
| "     | 6. | Kahororo Secondary School  |
| "     | 7. | Ruvu Secondary School      |
| "     | 8. | Kibaha Secondary School    |

LETTER OF RESEARCH CLEARANCE FROM THE  
TANZANIA PARENTS ASSOCIATION (TAPA)

UMOJA WA WAZAZI WA TANZANIA  
[Tanzania Parents Association]

Ofisi ya Mkoa,  
S.L.P. 1728,  
BUKOBA:  
7/3/1986

Kumb. Na: WA/KGR/1/6/78.

Mkuu wa shule,  
Omumwani shule ya Sekondari - Wazazi,  
S.L.P. 217,  
BUKOBA:

Yah: KIBALI CHA KUFANYA UTAFITI HAPO SHULENI  
FR. PETER M. RUTAYONGORORWA:

Husika na mada hiyo.

1. Mtajwa hapo juu Fr. Peter M. Rutayongororwa wa St. Joseph's Cathedral S.L.P. 167 Dar es Salaam ni mwanafunzi katika Chuo cha The Loyola University of Chicago, U.S.A.
2. Kwa sasa hivi yuko hapa Mkoani akifanya utafiti wake juu ya Elimu ya Kujitegemea ukiunganisha na kazi za kutumia nguvu (Kazi za Mikono) hasa katika mpango wa shule za Sekondari baada ya Azimio la Musoma 1974.
3. Kwa maana hiyo ni kwamba utafiti wake utalenga masuala hayo tu. Hivyo ruhusa imetolewa kwake ili uweze kumsaidia pale anapohitaji msaada wako.
4. Nategemea ushirikiano wako.

"UHURU NI KAZI"  
NA  
KAZI NI SEHEMU YA ELIMU SHULENI.

R.I. Nyakyoma,  
KATIBU WA WAZAZI WA MKOA,  
KAGERA:

Nakala kwa: Fr. Peter M. Rutayongororwa,  
Bunena Parish,  
BUKOBA:

## APPENDIX E

## APPENDIX E

A GUIDE USED IN THE OBSERVATION OF THE  
SIX SELECTED SECONDARY SCHOOLS

The information to be gathered should be relevant to the inclusion of manual work in the secondary school curriculum.

- A. Description of the School (cf. school records and oral informants)
1. Physical
  2. Historical
  3. Student population
  4. Neighborhood
  5. Teachers
  6. Reputation of school (academic and productive performance)
  7. Location
  8. Well known graduate or people affiliated to the school
- B. Manual Work ('Self-Reliance') Projects in the school (From school records and oral informants)
1. History
  2. Organization
  3. Accomplishments
  4. Problems
  5. In-service programs and opportunities
  6. Integration with community around
- C. Classroom Work (Observation: Form III, all subjects, one week per school)
1. Student initiative
  2. Student classroom physical activity
  3. Democratic teaching style
  4. Reference to manual work
- D. Field Observation of Self-Reliance Activities in Schools (All projects - - one week per school)
1. Punctuality
  2. Physical application
  3. Skill application
  4. Supervision
  5. Teachers' participation.
  6. Tools

E. School Social Environment in support of the Implementation of the reform (Manual work in schools)

1. Teaching Staff
2. Principal
3. Administrative Personnel
4. Student Body
5. Neighbourhood/Community

## APPENDIX F

## APPENDIX F

QUESTIONNAIRE ON THE INCLUSION OF MANUAL WORK  
IN THE SECONDARY SCHOOL CURRICULUM

Please answer all questions as accurately and truthfully as possible to the best of your knowledge. All the information you give will be treated confidentially; that is why I do not ask you to write your name. If there is any question that is not clear, I would be glad if you ask me to clarify it for you.

## Section A:

I Give the name and address of your school:

-----  
-----  
-----

II Answer the following questions with a check mark on the line before the answer. Please check only one answer.

(Example: ☐ a. Male ☒ b. Female)

1. Where were you born?                      2. What is your sex?

☐ a. Rural area  
☐ b. Urban area

☐ a. Male  
☐ b. Female

3. What is your position in the school?

☐ a. Principal  
☐ b. Teacher  
☐ c. Student

4. Where is your school located?

☐ a. Rural area  
☐ b. Urban area

5. Which of the following statements best fit your understanding of the aim(s) of "self-reliance" activities in your school? (More than one answer may be chosen if it applies.)

☐ a. To alleviate government expenditure on education.



- ☐ b. To foster right attitudes towards manual work.
- ☐ c. To develop in the young adequate knowledge and practical skills appropriate to the rural and urban economy of Tanzania.
- ☐ d. To apply what is learned in the classroom.
- ☐ e. All of the above.

6. In your own observation and experience, which one of the following goals is most emphasized in "self-reliance" projects in your school? (Choose one only.)

- ☐ a. Alleviation of growing government expenditure.
- ☐ b. Fostering the right attitudes toward manual work.
- ☐ c. To develop in the young adequate knowledge and practical skills appropriate to the rural and urban economy of Tanzania.
- ☐ d. Applying what is learned in the classroom.

7. Which one of the following statements do you agree with? (Please check one of the answers to complete the statement.)

"Self-reliance" activities in your school:

- ☐ a. enhance academic performance.
- ☐ b. undermine academic performance.
- ☐ c. have neutral effect on academic performance.

8. Given a choice, which secondary school model would you prefer?

- ☐ a. Secondary school with manual work as integral part of the curriculum.
- ☐ b. Secondary school with prime emphasis on academics.

9. The policy of inclusion of manual work in the secondary school curriculum is supported by:

	a lot	somewhat	not at all
	-----	-----	-----
a. Principal	-----	-----	-----
b. Teachers	-----	-----	-----
c. Parents	-----	-----	-----
d. Students	-----	-----	-----

10. How fair is your school's method of assessing students'

participation in "self-reliance" activities?

- ☐ a. very fair
- ☐ b. somewhat fair
- ☐ c. not at all fair

11. The National Examination Council's system of evaluating students' participation in "self-reliance" activities?

- ☐ a. very fair
- ☐ b. somewhat fair
- ☐ c. not at all fair

12. What other special remarks or comments would you like to make regarding the inclusion of manual work in the secondary school curriculum? (Please use the space below for your comments.)

Section B:

Please put a check mark [x] in the column that best answers the statement given. Only one of the five answers may be chosen:

- SA = Strongly Agree
- A = Agree
- U = Undecided
- D = Disagree
- SD = Strongly Disagree

	SA	A	U	D	SD
	-----	-----	-----	-----	-----
1. The inclusion of manual work in the school curriculum is a progressive step.	-----	-----	-----	-----	-----
2. Teachers accept wholeheartedly the inclusion of manual work in the curriculum.	-----	-----	-----	-----	-----
3. Students agree to the inclusion of manual work in the school curriculum.	-----	-----	-----	-----	-----
4. Parents prefer an academic-oriented curriculum to an integrated (academic and work) curriculum.	-----	-----	-----	-----	-----
5. The inclusion of manual work in the curriculum has a positive effect on academic performance.	-----	-----	-----	-----	-----
6. The inclusion of manual work in the curriculum enhances the acquisition of skills and knowledge for urban development.	-----	-----	-----	-----	-----
7. The inclusion of manual work in secondary schools enhances the acquisition of skills for rural development.	-----	-----	-----	-----	-----
8. "Self-reliance" activities do help schools economically.	-----	-----	-----	-----	-----
9. Education for Self-Reliance connotes ideas of manual work in schools.	-----	-----	-----	-----	-----
10. Students regard participation in "self-reliance" activities as important to their chance for higher education.	-----	-----	-----	-----	-----
11. The school's system of assessing the student's participation in "self-reliance" activities is fair.	-----	-----	-----	-----	-----

12. The policy of inclusion of manual work in the curriculum is indeed promoting cooperation and appreciation of manual work among students. -----
13. Please write on the space provided below, any remarks or comments you have regarding your attitudes and feelings towards the policy of inclusion of manual work in the secondary school curriculum.

ELIMU YA KUJITEGEMEA NA KAZI ZA MIKONO KATIKA RATIBA  
YA SHULE ZA SEKONDARI

Tafadhali jibu maswaki yote sahihi kadiri unovyoweza. Maelezo yote utakayotoa yatalindwa siri. Ndiyo sababu siyo lazima uandike jina lako. Kama kuna swali lisiloeleweka vizuri, maelezo zaidi yatatolewa.

Section A:

I Jina na anwani ya shule yako:

-----  
-----  
-----

II Jibu maswali yafuatayo kwa kutia alama ifuatayo mbele ya jibu lako. (Mfano: \_\_\_ a. Mwanamume x b. Mwanamke.)  
Chagua moja tu.

- |   |   |
|---|---|
| <p>1. Ulizaliwa wapi?<br/>___ a. Kijijini<br/>___ b. Mjini</p>                                  | <p>2. Mwanamume au mwanamke?<br/>___ a. Mwanamume<br/>___ b. Mwanamke</p> |
| <p>3. Ngazi yako shuleni?<br/>___ a. Mkuu wa Shule<br/>___ b. Mwalimu<br/>___ c. Mwanafunzi</p> | <p>4. Shule yako iko wapi?<br/>___ a. Vijijini<br/>___ b. Mjini</p>       |
5. Katika sentensi zifuatazo ni ipi inayoeleza zaidi madhumuni ya "Kazi za Kujitegemea" katika shule yako? (Unaweza kutoa zaidi ya jibu moja.)  
\_\_\_ a. Kazi za Kujitemegea hupunguza matumizi ya serkali katika elimu.  
\_\_\_ b. Kazi za Kujitemegea hukuza maelekezo mazuri kwa kazi za mikono.  
\_\_\_ c. Kazi za Kujitemegea hukuza katika wanafunzi ujuzi na ufundi unaofaa kwa maendeleo ya uchumi vijijini na mijini.  
\_\_\_ d. Kazi za Kujitemegea husaidia kutekeleza elimu ya darasani.  
\_\_\_ e. Kazi za Mikono husaidia yote yaliyotajwa hapo juu.
6. Uonavyo wewe ni lengo lipi kati ya hayo yafuatayo linalositizwa zaidi katika miradi ya kujitegemea shuleni mwako? (Chagua moja tu.)  
\_\_\_ a. Kupunguza matumizi ya serkali.  
\_\_\_ b. Kukuza maelekezo mazuri kwa kazi za mikono.  
\_\_\_ c. Kukuza katika wanafunzi ujuzi na ufundi unaofaa kwa

maendeleo ya uchumi vijijini na mijini.

\_\_\_ d. Kutekeleza elimu ya darasani.

7. \_\_\_ a. Hustawisha elimu ya darasani.

\_\_\_ b. Huzorotesha elimu ya darasani.

\_\_\_ c. Haziongezi wala hazipunguzi elimu ya darasani.

8. Ungependelea mfumo upi wa shule za sekondari? (Chagua moja tu.)

\_\_\_ a. Shule ya sekondari yenye kazi za mikono kama sehemu ya lazima katika ratiba yake.

\_\_\_ b. Shule ya sekondari yenye kuisisitiza zaidi elimu ya darasani.

9. Msimamo wa kuingiza kazi za mikono katika ratiba ya shule unaungwa mkono na:

	sana	kidogo tu	hata kidogo
	-----	-----	-----
a. Mkuu wa shule	-----	-----	-----
b. Walimu	-----	-----	-----
c. Wazazi	-----	-----	-----
d. Wanafunzi	-----	-----	-----

10. Je namna ya kuwatathmini wanafunzi katika kazi za kujitegemea ni ya haki?

\_\_\_ a. ya haki sana.

\_\_\_ b. ya haki kidogo.

\_\_\_ c. siyo ya haki hata kidogo.

11. Namna ya Baraza la Mitihani la Taifa kutathmini wanafunzi katika kazi za kujitegemea ni:

\_\_\_ a. ya haki sana.

\_\_\_ b. ya haki kidogo.

\_\_\_ c. siyo ya haki hata kidogo.

12. Mambo gani zaidi ungependa kutaja kuhusu mfumo wa kazi za mikono katika ratiba ya shule za sekondari?

## Section B:

Tafadhali tia alama [x] katika chumba cha jibu unaloliona kuwa sahihi zaidi. Chagua moja tu kati ya majibu matanu:

NS = Kakubaliana sana  
 N = Nakubaliana  
 M = Mashakani  
 S = Sikubaliani  
 SK = Sikubaliani kabisa

- |   | NS | N | M | S | SK |
|---|----|---|---|---|----|
| 1. Kazi za mikono katika ratiba ya shule za sekondari ni hatua yenye manufaa.   |    |   |   |   |    |
| 2. Walimu wanakubaliana kwa moyo mkunjufu na mfumo wa kazi za mikono katika ratiba ya shule.  |    |   |   |   |    |
| 3. Wanafunzi wanakubaliana na kazi za mikono kuwekwa katika ratiba ya shule.  |    |   |   |   |    |
| 4. Wazazi wanapendelea ratiba inayosisitiza elimu ya darasani kuliko ratiba inayoanisha elimu ya darasani na kazi za mikono.        |    |   |   |   |    |
| 5. Mfumo wa kazi za mikono katika ratiba unastawisha matokeo ya darasani.   |    |   |   |   |    |
| 6. Mfumo wa kazi za mikono katika ratiba unakuza ujuzi na ufundi ufaao kwa maendeleo mijini.  |    |   |   |   |    |
| 7. Mfumo wa kazi za mikono katika ratiba unakuza ujuzi na ufundi ufaao kwa maendeleo vijijini.                                      |    |   |   |   |    |
| 8. Miradi ya kujitegemea inasaidia mashule kiuchumi.  |    |   |   |   |    |
| 9. Elimu ya Kujitegemea inaeleweka kumaanisha kazi za mikono mashuleni.   |    |   |   |   |    |
| 10. Wanafunzi wanachukulia kazi za kujitegemea kama muhimu kwa kupata nafasi ya elimu ya juu.                                       |    |   |   |   |    |
| 11. Namna ya shule kutathmini wanafunzi katika kazi za kujitegemea ni ya haki.  |    |   |   |   |    |
| 12. Msimamo wa kazi za mikono katiba ratiba unastawisha ushirikiano na thamani ya kazi za mikono kati ya wanafunzi.                 |    |   |   |   |    |
| 13. Unayo mambo zaidi ya kutaja kuhusu mapendeleo na maelekeo kuhusu msimamo wa kazi za mikono katika ratiba ya shule za sekondari. |    |   |   |   |    |

## **APPENDIX G**



## APPENDIX G

CODE INDEX USED IN THE ANALYSIS OF THE  
QUALITATIVE DATA OF THE STUDY

- 1    Need of precise criteria for assessing students in productive work. The role of National Examinations Council.
- 2    Need to balance time on academics and manual work.
- 3    Policy is good. Positive affirmation.
- 4    Need of a scientific approach in productive activities.
- 5    Need of an educational approach in self-reliance activities.
- 6    Implementation of the policy is not good. This has created negative attitudes among students.
- 7    Need of research and curriculum planning before implementation.
- 8    Need of incentives, such as appropriate training and remuneration, for teachers' voluntary participation.
- 9    Manual work should not be used as punishment.
- 10   Money incentive can induce better student participation in productive activities.
- 11   Need of students to taste tangibly the fruits of their productive labor.
- 12   The target of 25 percent self-reliance of the catering expenses is over-ambitious and defeats its own purpose.
- 13   Need of adapting productive activities to the particular ecological and social environment of each school (integration).
- 14   Need of more economic support from the government in terms of better equipment and manpower.
- 15   The philosophy of ESR has been misunderstood to mean only agricultural activities.
- 16   Diversification/Vocationalization program is still academically-oriented. Too much theory.

- 17 Children of the "haves" go to international schools and other schools with less manual work activities. This is a class-issue.
- 18 Need to revive middle-school program of 1957-1968.
- 19 Only a few schools, e.g., rural schools, should be selected for emphasis on manual labor projects and the rest should emphasize academics.
- 20 Manual work projects should be limited to primary schools and certainly not beyond O-level secondary schools.
- 21 Manual work in schools enhances physical and mental fitness.
- 22 Need to build self-motivation (moyo wa kujituma) among students to do manual work.
- 23 Need of more conscientization about the value of manual work among students
- 24 Time-tables in secondary schools are over-crowded. There is no free time to allow for creativity.
- 25 Need of precise plans for each specific work-session. (Better planning).
- 26 Physical participation of teachers in productive activities is essential.
- 27 The policy simply is not good. (Negative evaluation). Productive activities should be like hobbies, that is, extra-curricular activities.
- 28 Need of better and modernized tools for productive activities.
- 29 Need of a reward-system for best performers (schools and individuals) in productive activities.
- 30 One day or two in a week are enough for manual work.
- 31 Need to have parents involved in this aspect of education.
- 32 Manual work activities help discipline in the school.
- 33 Need for better precautions against theft.
- 34 Need for "specialization". After Form II schools should concentrate on manual work projects relevant to their school bias.

- 35 "Demonstrable results" are essential. School should set an example to the community around.
- 36 Productive labor in schools should be humane and not like slave-labor.
- 37 More emphasis should be on rigorous academic training, necessary in the modern technological world. (Need for well-trained sharp minds).
- 38 Prospects for later use or continuity of acquired skills in productive work is essential.
- 39 Good leadership in and proper use of profits from self-reliance projects are vital elements in the success of the policy.
- 40 The Examination Council should only consider academic evaluation and let alone work/attitudes evaluation.
- 41 Need for special effort to conscientize parents regarding the value of manual work in schools.
- 42 Games should not be neglected because of self-reliance projects.
- 43 Need to include the "self-reliance period" in the academic timetable. It should not be left for the end of the day.
- 44 Need for greater emphasis on manual work activities in school.

## APPENDIX H

## APPENDIX H

THE CODE INDEX USED IN THE ANALYSIS OF THE  
QUANTITATIVE DATA OF THE STUDY

## CARD I (Section A)

NOSCH = Number of school

- 1 = Co-ed, Urban, O-Level, Public
- 2 = Boys, Rural, O-Level, Public, Boarding
- 3 = Girls, Rural, A-Level, Public, Boarding
- 4 = Boys, Rural, O-Level, Public, Boarding
- 5 = Co-ed, Urban, O-Level, Private, Semi-boarding
- 6 = Boys, Rural, A-Level, Public, Boarding

Q 1:

POB = Place of Birth

- 1 - Rural
- 2 - Urban

Q 2:

SEX = Sex of Respondent

- 1 - Female
- 2 - Male

Q 3:

PIS = Position in School

- 1 - Principal
- 2 - Teacher
- 3 - Student

Q 4:

LOS = Location of School

- 1 - Rural
- 2 - Urban

Q 5:

(1) ASRPA = Aim of "Self-reliance projects" - Alleviate government expenditure

(2) ASRPB = Aim of "self-reliance projects" - Foster good attitudes towards manual work.

- (3) ASRPC = Aim of "self-reliance projects" - Develop knowledge and skills for rural and urban development.
- (4) ASRPD = Aim of "self-reliance projects" - Apply what is learned in the classroom.
- (5) ASRPE = Aim of "self-reliance projects" - All of the above aims (comprehensive understanding of the policy).

Q 6:

MEG = Most emphasized goals in the practical implementation of the policy.

- 1 - Alleviation of government expenditure
- 2 - Fostering good attitudes towards manual work
- 3 - Developing knowledge and skills
- 4 - Applying what is learned in the classroom

Q 7:

IACP = Impact of the policy on academic performance

- 1 - Enhances academic performance
- 2 - Undermines academic performance
- 3 - Has neutral effect on academic performance

Q 8:

SSM = Preferred model of secondary school

- 1 - Integrated model (work and education)
- 2 - Academic model

Q 9:

(a) SOPPRMW = Support of manual work policy by principals

- 1 - a lot
- 2 - somewhat
- 3 - not at all

(b) SOPTRMW = Support of manual work policy by teachers

- 1 - a lot
- 2 - somewhat
- 3 - not at all

(c) SOPPTMW = Support of manual work policy by parents

- 1 - a lot
- 2 - somewhat
- 3 - not at all

(d) SOPSTMW = Support of manual work policy by students

- 1 - a lot
- 2 - somewhat
- 3 - not at all

Q 10:

MASS = Fairness of the method of assessment of "manual work" in schools

- 1 - very fair
- 2 - somewhat fair
- 3 - not at all fair

Q 11:

ESY = Fairness of examination system (national) regarding students' participation in manual work

- 1 - very fair
- 2 - somewhat fair
- 3 - not at all fair

## CARD II (Section B)

Q 1:

MWAPS = Inclusion of manual work in secondary school curriculum is a progressive step.

- 1 - strongly agree
- 2 - agree
- 3 - undecided
- 4 - disagree
- 5 - strongly disagree

Q 2:

TATT = Evaluation of teachers' attitudes towards manual work in the secondary curriculum

Value labels = 1 - 5 (Ut supra in MWAPS)

Q 3:

SATT = Evaluation of students' attitudes towards manual work in the secondary curriculum

Value labels = 1 - 5 (Ut supra in MWAPS)

Q 4:

PATT = Evaluation of parents' attitudes towards manual work in the secondary curriculum

Value labels = 1 - 5 (Ut supra in MWAPS)

- Q 5:  
 MWAC = Manual work in secondary schools enhances academic performance  
 Value labels = 1 - 5 (Ut supra in MWAPS)
- Q 6:  
 AUS = Policy promotes acquisition of knowledge and skills required for urban development  
 Value labels = 1 - 5 (Ut supra in MWAPS)
- Q 7:  
 ARS = Policy promotes acquisition of knowledge and skills required for rural development  
 Value labels = 1 - 5 (Ut supra in MWAPS)
- Q 8:  
 ECSR = (Evaluation of economic contribution of ESR)  
 "Self-Reliance Activities" do help the schools economically  
 Value labels = 1 - 5 (Ut supra in MWAPS)
- Q 9:  
 MWESR = Manual work in secondary schools is equated to evaluation for self-reliance  
 Value labels = 1 - 5 (Ut supra in MWAPS)
- Q 10:  
 SRHE = Students regard "manual work projects" as essential to chances for higher education  
 Value labels = 1 - 5 (Ut supra in MWAPS)
- Q 11  
 SRASS = The school's system of assessing students' participation in "manual work projects" is fair  
 Value labels = 1 - 5 (Ut supra in MWAPS)
- Q 12:  
 SRATT = Cooperation and appreciation of manual work are being promoted by "manual work activities" in secondary schools  
 Value labels = 1 - 5 (Ut supra in MWAPS)

Note:

Level of significance chosen = 0.05.



## APPENDIX I

## APPENDIX I

TAARIFA YA UZALISHAJI MALI KATIKA SHULE ZA SEKONDARI  
ZA SERIKALI - MWAKA 1983 KWA KUFUATA NAFASI ZA USHINDI

[Report on the Production Activities in Government  
Secondary Schools in Order of Performance - 1983]

NA (pos)	JINA LA SHULE (name of school)	MATUMIZI (Cost of prod'n)	MAPATO (Total prod'n)	FAIDA (Net profit)	IDADI YA W'NZI (no. of students)	FAIDA KI- LA M'NZI (profit/ student)
1	Kibiti	479,577	748,714	269,197	158	1.703
2	Weruweru	62,363	896,892	834,529	581	1,436
3	Same	700,355	1,076,521	376,166	286	1,315
4	Ndanda	[numbers not legible]		633,020	585	1,082
5	Kibaha	733,944	1,248,047	514,103	620	829
6	Kilosa	317,601	707,774	390,173	501	779
7	Magamba	473,215	663,225	190,011	283	671
8	Karatu	164,870	439,496	274,626	423	649
9	Ruvu	772,361	1,067,826	295,465	497	594
10	Tumaini	323,818	458,490	134,672	300	449
11	Chidya	182,399	803,235	120,836	271	446
12	Lyamungu	72,733	263,368	190,635	429	444
13	Kantalamba	177,702	333,765	156,063	385	405
14	Mbeya	174,515	292,280	117,765	293	402
15	Machame	93,568	210,808	117,239	292	402
16	Mtwara Tech.	217,361	365,903	148,541	386	385
17	Lindi	275,722	406,608	130,887	372	352
18	Rungwe	184,895	283,817	98,922	287	345
19	Iringa Girls	284,693	384,366	99,674	305	327
20	Ifunda	91,824	282,409	190,584	712	268
21	Minaki	203,920	342,492	138,579	519	267
22	Ifakara	69,778	201,958	132,179	505	262
23	Kwiro	181,447	255,559	74,112	296	250
24	Iyunga	163,115	297,679	134,564	571	236
25	Malangali	95,197	160,786	665,539	284	231
26	Songea Boys	235,639	391,740	156,100	702	222
27	Ilboru	555,990	677,463	121,473	575	211
28	Bwiru Girls	214,725	269,526	54,801	271	202
29	Mzumbe	329,839	461,195	131,656	657	200
30	Njombe	318,281	426,012	107,731	577	187
31	Mawenzi	237,290	337,373	100,084	537	186
32	Tarime	189,756	275,200	85,445	486	185
33	Forodhani	471,692	557,044	85,352	496	172
34	Umbwe	87,508	132,419	44,910	288	156
35	Mpwapwa	212,256	280,352	68,096	443	154
36	Milambo	74,388	130,451	56,063	372	151
37	Moshi	55,680	159,922	104,242	715	146
38	Tosamaganga	47,646	133,279	85,633	592	145
39	Tabora Boys	156,502	230,778	74,268	514	144
40	Nganza	220,667	262,733	42,066	299	141

41	Korogwe	155,974	233,886	77,912	559	139
42	Nsumba	20,883	77,599	57,017	412	138
43	Kisutu	35,214	78,046	42,832	341	126
44	Songea Girls	95,612	164,565	68,952	578	119
45	Moshi Tech.	115,322	193,016	77,695	702	111
46	Azania	37,238	117,914	80,676	763	106
47	Msalato	30,215	87,821	57,606	568	101
48	Galanos	94,117	146,960	52,843	527	100
49	Bihawana	289,051	317,856	28,805	290	99
50	Shinyanga	7,020	64,418	57,399	582	99
51	Mtwara Girls	4,309	30,313	26,004	277	94
52	Nyakato	260,748	298,024	37,276	414	90
53	Kigonsera	15,313	51,024	35,711	414	86
54	Shinyanga Com.	61,570	80,864	19,293	230	84
55	Ashira	95,736	133,741	30,903	462	82
56	Lugalo	96,355	128,200	31,845	404	79
57	Ihungo	140,085	179,266	39,181	520	75
58	Bwiru Boys	197,959	209,031	21,072	282	75
59	Musoma	182,403	214,917	32,514	467	70
60	Morogoro	224,212	245,757	21,545	311	69
61	Mazengo	314,876	372,771	57,895	876	66
62	Masasi	233,288	260,206	26,918	410	66
63	Rugambwa	23,191	53,362	30,161	504	60
64	Kilakala	289,365	322,985	33,620	578	58
65	Dodoma	65,479	87,940	22,461	403	56
66	Usagara	106,304	158,481	52,177	941	55
67	Mara	1,558	17,089	15,531	297	52
68	Mwenge	7,735	34,428	26,693	513	52
69	Kahororo	18,920	34,517	15,597	305	51
70	Loleza	72,463	92,797	20,334	403	50
71	Bukoba	8,098	22,051	13,954	278	50
72	Kigoma	171,926	192,980	21,054	437	48
73	Tabora Girls	23,948	45,748	21,802	536	41
74	Pugu	69,613	97,268	27,655	743	37
75	Jangwani	6,071	22,823	16,753	476	35
76	Tunduru	1,200	11,855	10,655	320	33
77	Zanaki	123,111	138,107	14,996	600	25
78	Sengerema	15,689	28,977	13,288	557	24
79	Arusha	114,346	123,547	9,201	396	23
80	Tanga	113,663	129,140	15,477	670	23
81	Tambaza	389,289	406,330	16,941	770	22
82	Kazima	9,520	20,109	10,589	522	20
83	Kibasila	217,640	222,401	5,361	398	13
84	Bagamoyo	225,169	227,487	2,318	575	4
85	Mwanza	8,009	5,884	-2,125	486	-4

J U M L A	17,038,005	8,519,427	215
[Total]	25,587,432	39,737	

Note: The figures in the above table are approximated to the nearest whole number. The original figures can be obtained from the researcher.

Source: Ministry of National Education, Tanzania. (Mimeographed.)

## APPENDIX J

## APPENDIX J

COMPARATIVE PERFORMANCE OF FORM FOUR SECONDARY SCHOOLS  
1985

Center No.	Name of Center	GPA	Rank
S 141	Namupa Seminary	1.92	1
S 117	Kasita Seminary	2.11	2
S 118	Katoke Seminary	2.17	3
S 127	Makoko Seminary	2.25	4
S 130	Maua Seminary	2.30	5
S 148	Rubya Seminary	2.30	5
S 107	Lutheran Jr. Seminary	2.31	7
S 124	Likonde Seminary	2.59	8
S 101	Azania	2.67	9
S 347	Tambaza	2.67	9
S 165	Uru Seminary	2.70	11
S 108	Ifunda	2.75	12
S 159	Ujiji	2.77	13
S 150	Same	2.82	14
S 156	Tanga Tech.	2.86	15
S 121	St. James Seminary	2.88	16
S 210	Bigwa	2.91	17
S 171	Arusha Seminary	2.93	18
S 110	Ilboru	2.95	19
S 204	Jangwani	2.97	20
S 224	Kifungilo	3.00	21
S 109	Ihungo	3.00	21
S 111	Forodhani	3.00	21
S 154	St. Peter's Seminary	3.03	24
S 157	Hanga Seminary	3.04	25
S 169	Bihawana	3.04	25
S 330	Mbeya	3.06	27
S 131	Mazengo	3.10	28
S 133	Minaki	3.13	29
S 149	Rungwe	3.14	30
S 132	Moshi Tech.	3.15	31
S 304	Bukoba	3.15	31
S 155	Tabora Boys	3.15	31
S 113	Mafinga	3.17	34
S 119	Kibaha	3.17	34
S 222	Zanaki	3.18	36
S 316	Kibasila	3.19	37
S 114	Kaengesa	3.20	38
S 134	Moshi Sec.	3.22	39
S 158	Tosamaganga	3.23	40
S 168	Sanu Seminary	3.28	41
S 221	Weru Weru	3.30	42
S 116	Kantalamba	3.32	43
S 145	Nyakato	3.33	44
S 160	Umbwe	3.34	45

S 345	Usagara	3.35	46
S 348	Tumaini	3.36	47
S 328	Mawenzi	3.36	47
S 388	Marangu	3.37	48
S 139	Mtwara Tech.	3.37	48
S 369	Ruvu	3.39	51
S 364	Karatu	3.40	52
S 342	Shaban Robert	3.41	53
S 106	Dungunyi	3.42	54
S 167	Kidugala	3.42	54
S 138	Mpwapwa	3.44	56
S 302	Arusha Sec.	3.45	57
S 143	Njombe	3.48	58
S 153	Shinyanga	3.48	58
S 142	Galanos	3.49	59
S 132	Milambo	3.49	59
S 129	Mara	3.49	59
S 151	Sengerema	3.51	62
S 112	Iyunga	3.52	63
S 120	Kigonsera	3.53	64
S 220	Tabora Girls	3.53	64
S 359	Bagamoyo	3.54	66
S 201	Ashira	3.55	67
S 128	Malangali	3.55	67
S 205	Kibosho	3.56	69
S 367	Kilosa	3.56	69
S 103	Bihawana	3.57	71
S 366	Chuo cha Uchumi	3.58	72
S 370	Ifakara	3.59	73
S 363	Mwadui	3.60	74
S 147	Pugu	3.60	74
S 207	Kiraeni	3.60	74
S 333	Mwanza	3.60	74
S 105	Bwiru Boys	3.61	78
S 306	Dodoma Sec.	3.61	78
S 413	Kibiti	3.62	80
S 126	Magamba	3.62	80
S 202	Bwiru Girls	3.62	80
S 212	Machame	3.68	83
S 125	Lyamungu	3.68	83
S 208	Kisutu	3.69	85
S 314	Kazima	3.70	86
S 324	Lindi	3.71	87
S 217	Peramiho	3.71	87
S 206	Kilakala	3.72	89
S 325	Lugalo	3.72	89
S 144	Nsumba	3.73	91
S 211	Loleza	3.74	92
S 122	Kilimanjaro	3.74	92
S 340	Popatlal	3.76	94
S 318	Kibohehe	3.78	95
S 322	Kolila	3.78	95
S 219	Songea Girls	3.79	97
S 323	Lake	3.80	98

S 341	Sangu	3.81	99
S 106	Dungunysi	3.81	99
S 320	Kigoma	3.81	99
S 359	Kigurunyembe	3.83	102
S 123	Kwiro	3.84	103
S 111	Itaga	3.85	104
S 380	Uchama	3.85	104
S 312	Highlands	3.86	106
S 362	Ihanja	3.87	107
S 215	Mtwara	3.87	107
S 136	Musoma	3.88	109
S 400	Shamiani	3.88	109
S 372	Kirua	3.90	111
S 307	Dodoma Central	3.90	111
S 353	Parane	3.91	113
S 335	Mzizima	3.91	113
S 214	Msalato	3.92	115
S 332	Morogoro	3.92	115
S 218	Rugambwa	3.92	115
S 368	Imboru	3.93	118
S 404	Tunduru	3.94	119
S 309	Fidel Castro	3.94	119
S 209	Korogwe	3.94	119
S 216	Nganza	3.94	119
S 389	Shauri Tanga	3.95	123
S 397	Rungwe	3.95	123
S 305	Buluba	3.95	123
S 163	Muslim	3.95	123
S 343	Siha	3.96	127
S 338	Ndanda	3.96	127
S 153	Songea Boys	3.97	129
S 203	Iringa Girls	3.97	129
S 386	Geita	3.99	131
S 417	Mwakaleli	4.02	132
S 387	Karagwe	4.04	133
S 344	Shirati	4.04	133
S 414	Iambi	4.05	135
S 326	Lumumba	4.05	135
S 327	Minja Singe	4.06	137
S 371	Lombeta	4.07	138
S 327	Singe	4.07	138
S 213	Masasi	4.08	140
S 310	Forest Hill	4.08	140
S 405	Biharamulo	4.08	140
S 419	Chome	4.09	143
S 329	Makumira	4.09	143
S 391	Haileselasie	4.09	143
S 303	Arusha Meru	4.10	146
S 352	Tarime	4.10	146
S 349	Manka	4.11	148
S 321	Kinondoni	4.11	148
S 401	Namfua	4.11	148
S 356	Vunjo	4.12	151
S 357	Uru	4.14	152

S 373	Kyela	4.16	153
S 406	Kashozi	4.16	153
S 358	Shighatini	4.18	155
S 360	Kishoju	4.18	155
S 422	Hedenu	4.19	157
S 384	Mikunguni	4.19	157
S 407	Mugeza	4.20	159
S 385	Ujiji	4.21	160
S 375	Jumuiya	4.21	160
S 383	Bembela	4.22	162
S 346	Ujui	4.23	163
S 355	Lomwe	4.23	163
S 381	Utaani	4.24	165
S 331	Mkonge	4.25	166
S 339	Omumwani	4.29	167
S 226	Kanguli	4.29	167
S 317	Kibo	4.30	169
S 433	Kibosho Tech	4.31	170
S 308	Enaboishu	4.32	171
S 392	Vikokotoni	4.33	172
S 418	Lutengano	4.38	173
S 313	Ikizu	4.41	174
S 378	Hegongo	4.44	175
S 409	Monduli	4.46	176
S 390	Hamamni	4.49	177
S 354	Jitengeni	4.56	178
S 410	Uzini	4.60	179

Source: National Examinations Council, Tanzania. (Handwritten.)



## APPENDIX K

## APPENDIX K

SEMI-STRUCTURED INTERVIEW GUIDE  
FOR SELECTED INDIVIDUALS

Those to be interviewed will be requested to give the information accurately and truthfully as possible to the best of their knowledge. They will also be assured that all the information given will be treated as confidential.

## A. Information about the interviewee:

1. Location (institution) of the interviewee \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_
2. Status as educator:  
University Instructor \_\_\_\_\_  
Official/Ministry of Education \_\_\_\_\_  
Parent \_\_\_\_\_  
Legislator \_\_\_\_\_  
Party Leader \_\_\_\_\_  
Community member \_\_\_\_\_
3. Sex of interviewee \_\_\_\_\_ Male \_\_\_\_\_ Female

## B. Questions to the interviewee:

1. What do you consider to be the major goals for the inclusion of manual work in the secondary school curriculum?

Suggested answers:

- a. To alleviate growing government expenditure on education.
- b. To foster right attitudes toward manual work.
- c. To impart skills and knowledge required in the underdeveloped rural/urban economy of Tanzania.
- d. To apply what is learned in the classroom.
- e. In addition to the above \_\_\_\_\_  
\_\_\_\_\_

2. In your own observation and experience, do you think that the inclusion of manual work in schools helps in:

- a. Alleviating government expenditures in schools?

Yes \_\_\_\_\_ Why? \_\_\_\_\_  
No \_\_\_\_\_ Why? \_\_\_\_\_

- b. Promoting the appreciation of manual work among students?

Yes \_\_\_\_\_ Why? \_\_\_\_\_  
No \_\_\_\_\_ Why? \_\_\_\_\_

c. Imparting skills crucial to rural/urban development Tanzania?

Yes \_\_\_\_ Why? \_\_\_\_\_  
 No \_\_\_\_ Why? \_\_\_\_\_

3. Do you consider as positive or negative the influence of the following on the implementation of manual work in the secondary school curriculum?

a. Teachers

Positive \_\_\_\_ Why? \_\_\_\_\_  
 Negative \_\_\_\_ Why? \_\_\_\_\_

b. Parents

Positive \_\_\_\_ Why? \_\_\_\_\_  
 Negative \_\_\_\_ Why? \_\_\_\_\_

c. Student Body

Positive \_\_\_\_ Why? \_\_\_\_\_  
 Negative \_\_\_\_ Why? \_\_\_\_\_

d. National Examination System

Positive \_\_\_\_ Why? \_\_\_\_\_  
 Negative \_\_\_\_ Why? \_\_\_\_\_

e. National Political Economy

Positive \_\_\_\_ Why? \_\_\_\_\_  
 Negative \_\_\_\_ Why? \_\_\_\_\_

4. How does the actual implementation of "self-reliance" activities affect the quality of secondary education?

Positively \_\_\_\_ Why? \_\_\_\_\_  
 Negatively \_\_\_\_ Why? \_\_\_\_\_  
 Other comments: \_\_\_\_\_

5. What other remarks or comments would you like to make regarding the actual implementation of the inclusion of manual work in the secondary schools? \_\_\_\_\_

## KISWAHILI TEXT OF THE INTERVIEW GUIDE

MWONGOZO WA MAHOJIANO KUHUSU KAZI  
ZA MIKONO MASHULENI

Wahojiwa wataombwa kutoa majibu yaliyo sahihi kadiri ya uwezo wao. Pia watahakikishiwa kwamba maoni yao yote yatalindwa siri.

## A. Maelezo kuhusu mhojiwa.

## 1. Mahali (tahasisi) pa mhojiwa.

Anwani \_\_\_\_\_

## 2. Ngazi ya mhojiwa kama mlezi.

- \_\_\_\_\_ a. Mwalimu wa Chuo Kikuu.
- \_\_\_\_\_ b. Afisa/Wizara ya Elimu ya Taifa
- \_\_\_\_\_ c. Mzazi
- \_\_\_\_\_ d. Mwanasheria
- \_\_\_\_\_ e. Kiongozi wa chama.
- \_\_\_\_\_ f. Mwana-Jumuia

## 3. Mwanamume au Mwanamke.

- \_\_\_\_\_ a. Mwanamume
- \_\_\_\_\_ b. Mwanamke

## B. Maswali kwa mhojiwa.

## 1. Uonavyo wewe ni malengo yapi yaliyo muhimu katika mfumo wa kazi za mikono katika ratiba ya shule za sekondari?

Mfano wa majibu:

- \_\_\_\_\_ a. Kapunguza matumizi ya serkali kwa elimu.
- \_\_\_\_\_ b. Kustawisha maelekeo mazuri kwa kazi za mikono.
- \_\_\_\_\_ c. Kutoa ufundi na ujuzi unaohitajiwa katika maendeleo ya uchumi mijini na vijijini.
- \_\_\_\_\_ d. Kutekeleza elimu ya darasani.
- \_\_\_\_\_ e. Zaidi ya hayo yaliyotajwa hapo juu. \_\_\_\_\_

## 2. Kutokana na ujuzi wako unadhani kwamba kazi za mikono mashuleni husaidia:

## a. Kupunguza matumizi ya serkali mashuleni?

- \_\_\_\_\_ Ndiyo. Kwa sababu \_\_\_\_\_
- \_\_\_\_\_ Hapana. Kwa sababu \_\_\_\_\_

## b. Kukuza thamani ya kazi za mikono kati ya wanafunzi.

- \_\_\_\_\_ Ndiyo. Kwa sababu \_\_\_\_\_
- \_\_\_\_\_ Hapana. Kwa sababu \_\_\_\_\_

## c. Kutoa ufundi na ujuzi unaohitajiwa kwa maendeleo mi-jini na vijijini?

- \_\_\_\_\_ Ndiyo. Kwa sababu \_\_\_\_\_
- \_\_\_\_\_ Hapana. Kwa sababu \_\_\_\_\_

3. Utekelezaji wa kazi za mikono katika ratiba ya shule za sekondari unasaidiwa au sivyo na:

a. Walimu

\_\_\_\_\_ Ndiyo. Kwa sababu \_\_\_\_\_

\_\_\_\_\_ Hapana. Kwa sababu \_\_\_\_\_

b. Wazazi

\_\_\_\_\_ Ndiyo. Kwa sababu \_\_\_\_\_

\_\_\_\_\_ Hapana. Kwa sababu \_\_\_\_\_

c. Wanafunzi

\_\_\_\_\_ Ndiyo. Kwa sababu \_\_\_\_\_

\_\_\_\_\_ Hapana. Kwa sababu \_\_\_\_\_

d. Mfumo wa Mitihani wa Taifa

\_\_\_\_\_ Ndiyo. Kwa sababu \_\_\_\_\_

\_\_\_\_\_ Hapana. Kwa sababu \_\_\_\_\_

e. Mfumo wa Siasa na Uchumi wa Taifa

\_\_\_\_\_ Ndiyo. Kwa sababu \_\_\_\_\_

\_\_\_\_\_ Hapana. Kwa sababu \_\_\_\_\_

4. Je utekelezaji wa kazi za kujitegemea unagusaje ubora wa elimu ya sekondari?

\_\_\_\_\_ Hukuza. Kwa sababu \_\_\_\_\_

\_\_\_\_\_ Hupunguza. Kwa sababu \_\_\_\_\_

\_\_\_\_\_ Maoni mengine \_\_\_\_\_

5. Maoni gani zaidi ungependa kutaja kuhusu utekelezaji wa mfumo wa kazi za mikono katika ratiba ya shule za sekondari? Tafadhali yaandike hapa chini.

## APPENDIX L

## APPENDIX L

## ANALYTICAL TABLES OF RESPONSES TO THE QUESTIONNAIRES

TABLE 28

SCHOOLS BY IMPACT OF POLICY ON ACADEMIC PERFORMANCE  
(NOSCH X IACP)<sup>1</sup>

School	1		2		3		Total	
	No	%	No	%	No	%	No	%
1	26	48.1	9	16.7	19	35.2	54	14.0
2	36	59.0	5	8.2	20	32.8	61	15.8
3	36	52.2	5	7.2	28	40.6	69	17.9
4	30	44.1	22	32.4	16	23.5	68	17.6
5	38	55.1	6	8.7	25	36.2	69	17.9
6	28	43.1	17	26.2	20	30.8	65	16.8
Total	194	50.3	64	16.6	128	33.2	386	100.0

Chi-square = 28.54    D.F. = 10    Significance = .0015

TABLE 29

SCHOOLS BY PREFERRED MODEL OF SECONDARY SCHOOL  
(NOSCH X SSM)

School	1		2		Total	
	No	%	No	%	No	%
1	39	68.4	18	31.6	57	14.8
2	50	83.3	10	16.7	60	15.5
3	50	73.5	18	26.5	68	17.6
4	36	15.2	33	47.8	69	17.9
5	45	65.2	24	36.8	69	17.9
6	38	60.3	25	39.7	63	16.3
Total	258	66.8	128	33.2	386	100.0

Chi-square = 16.79    D.F. = 5    Significance = 0.0049

<sup>1</sup>The Code Index for the value labels used in all tables in Appendix N is found in Appendix J.

The symbols No and % in the columns stand for number and percentage of responses respectively.

TABLE 30

SCHOOLS BY SUPPORT OF MANUAL WORK BY TEACHERS  
(NOSCH X SOPTRMW)

	1		2		3		Total	
School	No	%	No	%	No	%	No	%
1	25	51.0	23	46.9	1	2.0	49	14.4
2	38	76.0	10	20.0	2	4.0	50	14.7
3	35	52.2	32	47.8			67	19.6
4	34	57.6	21	35.6	4	6.8	59	17.3
5	34	55.7	24	39.3	3	4.9	61	17.9
6	21	38.2	30	54.5	4	7.3	55	16.1
Total	187	54.8	140	41.1	14	4.1	341	100.0

Chi-square = 22.36    D.F. = 10    Significance = 0.0134

TABLE 31

SCHOOLS BY POLICY AS PROGRESSIVE STEP IN SECONDARY EDUCATION  
(NOSCH X MWAPS)

	1		2		3		4		5		Total	
Sch	No	%	No	%	No	%	No	%	No	%	No	%
1	25	43.9	26	45.6	4	7.0	1	1.8	1	1.8	57	14.7
2	35	57.4	18	29.5	7	11.5	1	1.6	-	-	61	15.7
3	39	56.5	25	36.2	-	-	3	4.3	2	2.9	69	17.7
4	28	40.0	27	38.6	7	10.0	2	2.9	6	8.6	70	18.0
5	35	52.2	24	35.8	5	7.5	3	4.5	-	-	67	17.2
6	25	38.5	31	47.7	4	6.2	4	6.2	1	1.5	65	16.7
Total=187	48.1		151	38.8	27	6.9	14	3.6	10	2.6	389	100.0

Chi-square = 32.30    D.F. = 20    Significance = 0.0402



TABLE 32

SCHOOLS BY TEACHER'S ATTITUDES TOWARDS THE POLICY  
(NOSCH X TATT)

	1		2		3		4		5		Total	
Sch	No	%	No	%	No	%	No	%	No	%	No	%
1	18	32.1	24	32.9	7	5.5	6	10.7	1	1.8	56	14.6
2	31	51.7	20	33.3	9	15.0	-	-	-	-	60	15.6
3	15	22.4	25	37.3	17	25.4	9	13.4	1	1.5	67	17.4
4	20	29.0	19	27.5	14	20.3	8	11.6	8	11.6	69	18.0
5	19	27.9	29	42.6	13	19.1	5	7.4	2	2.9	68	17.7
6	15	23.4	22	34.4	14	21.9	11	17.2	2	3.1	64	16.7
Total=118	30.7	139	36.2	74	19.3	39	10.2	14	3.6	384	100.0	

Chi-square = 44.30      D.F.= 20      Significance = 0.0014

TABLE 33

SCHOOLS BY STUDENTS' ATTITUDES TOWARDS THE POLICY  
(NOSCH X SATT)

	1		2		3		4		5		Total	
Sch	No	%	No	%	No	%	No	%	No	%	No	%
1	11	19.6	20	35.7	14	25.0	3	5.4	8	14.3	56	14.5
2	19	32.8	21	36.2	11	19.0	5	8.6	2	3.4	58	15.0
3	15	21.7	23	33.3	14	23.2	10	14.5	5	7.2	69	17.9
4	12	17.4	15	21.7	20	29.0	6	8.7	16	23.2	69	17.9
5	13	18.8	32	46.4	11	15.9	8	11.6	5	7.2	69	17.9
6	7	10.8	15	23.1	16	24.6	18	27.7	9	13.8	65	16.8
Total= 77	19.9	126	32.6	88	22.8	50	13.0	45	11.7	386	100.0	

Chi-square = 49.34      D.F. = 20      Significance = 0.0003

TABLE 34

SCHOOLS BY MANUAL WORK ENHANCES ACADEMICS  
(NOSCH X MWAC)

	1		2		3		4		5		Total	
Sch	No	%	No	%	No	%	No	%	No	%	No	%
1	10	17.9	9	16.1	16	28.6	11	19.6	10	17.9	56	14.7
2	14	23.3	21	35.0	8	13.3	8	13.3	9	15.0	60	15.7
3	10	14.7	19	27.9	20	29.4	15	21.1	4	5.9	68	17.8
4	13	19.4	9	13.4	11	16.4	17	25.4	17	25.4	67	17.5
5	17	25.8	16	24.2	18	27.3	9	13.6	6	9.1	66	17.3
6	13	20.0	10	15.4	12	18.5	12	18.5	18	27.7	65	17.0
Total	77	20.2	84	22.0	85	22.3	72	18.8	64	16.8	382	100.0

Chi-square = 38.39      D.F. = 20      Significance = 0.0079

TABLE 35

SCHOOLS BY POLICY HELPS ACQUISITION OF URBAN SKILLS  
(NOSCH X AUS)

	1		2		3		4		5		Total	
Sch	No	%	No	%	No	%	No	%	No	%	No	%
1	15	27.3	18	32.7	9	16.4	9	16.4	4	7.3	55	14.3
2	13	21.7	10	16.7	8	13.3	19	31.7	10	16.7	60	15.6
3	11	16.2	21	30.9	13	19.1	10	14.7	13	19.1	68	17.7
4	8	11.6	13	18.8	8	11.6	21	30.4	19	27.5	69	18.0
5	17	25.4	17	25.4	13	19.4	17	25.4	3	4.5	67	17.4
6	11	16.9	12	18.5	10	15.4	12	18.5	20	30.8	65	16.9
Total	75	19.5	91	23.7	61	15.9	88	22.9	69	18.0	384	100.0

Chi-square = 41.33      D.F. = 20      Significance = 0.0034

TABLE 36

SCHOOLS BY POLICY HELPS SCHOOLS ECONOMICALLY  
(NOSCH X ECSR)

	1		2		3		4		5		Total	
Sch	No	%	No	%	No	%	No	%	No	%	No	%
1	27	49.1	20	36.4	3	5.5	4	7.3	1	1.8	55	14.4
2	36	59.0	18	29.5	2	3.3	4	6.6	1	1.6	61	16.0
3	33	48.5	23	33.8	6	8.8	4	5.9	2	2.9	68	17.8
4	20	29.9	26	38.8	7	10.4	5	7.5	9	13.4	67	17.5
5	43	64.2	21	31.3	2	3.0	1	1.5	-	-	67	17.5
6	27	42.2	27	42.2	5	7.8	3	4.7	2	3.1	64	16.8
Total=168	48.7	135	35.3	25	6.5	21	5.5	15	3.9	382	100.0	

Chi-square = 39.47    D.F. = 20    Significance = 0.0058

TABLE 37

SCHOOLS BY POLICY AFFECTS CHANCES TO HIGHER EDUCATION  
(NOSCH X SRHE)

	1		2		3		4		5		Total	
Sch	No	%	No	%	No	%	No	%	No	%	No	%
1	9	16.4	8	14.5	11	20.0	16	29.1	11	20.0	55	14.4
2	10	16.4	11	18.0	8	13.1	21	34.4	11	18.0	61	15.9
3	3	4.5	10	14.9	15	22.4	26	38.8	13	19.4	67	17.5
4	14	20.6	11	16.2	11	16.2	14	20.6	18	26.5	68	17.8
5	15	22.4	16	23.9	12	17.9	15	22.4	9	13.4	67	17.5
6	7	10.8	4	6.2	13	20.0	15	23.1	26	40.0	65	17.0
Total	58	15.1	60	15.7	70	18.3	107	27.9	88	23.0	383	100.0

Chi-square = 37.27    D.F. = 20    Significance = 0.0109

TABLE 38

SCHOOLS BY POLICY PROMOTES SR/ATTITUDES OF COOPERATION  
AND APPRECIATION OF MANUAL WORK  
(NOSCH X SRATT)

	1		2		3		4		5		Total	
Sch	No	%	No	%	No	%	No	%	No	%	No	%
1	28	49.1	18	31.6	7	12.3	2	3.5	2	3.5	57	14.7
2	29	48.3	22	36.7	5	8.3	2	3.3	2	3.3	60	15.5
3	28	40.6	30	43.5	7	10.1	1	1.4	3	4.3	69	17.8
4	19	27.5	29	42.0	9	13.0	3	4.3	9	13.0	69	17.8
5	23	33.8	29	42.0	10	14.7	6	8.8	-	-	68	17.6
6	18	28.1	18	28.1	11	17.2	9	14.1	8	12.5	64	16.5
Total=145	37.5		146	37.7	49	12.7	23	5.9	24	6.2	387	100.0

Chi-square = 41.033      D.F. = 20      Significance = 0.0037

TABLE 39

SCHOOLS BY AIMS OF SR/OBJECTIVES IN SCHOOLS  
(NOSCH X AS)

	1		2		3		4		5		Total	
Sch	No	%	No	%	No	%	No	%	No	%	No	%
1	3	5.3	2	3.5	30	52.6	4	7.0	18	13.6	57	14.6
2	-	-	1	1.6	27	44.3	5	8.2	28	45.9	61	15.6
3	-	-	3	4.3	38	55.1	6	8.7	22	31.9	69	17.6
4	2	2.9	2	2.9	31	44.3	12	17.1	23	32.9	70	17.9
5	1	1.4	4	5.8	40	58.0	8	11.6	16	23.3	69	17.6
6	4	6.2	7	10.8	24	36.9	9	13.8	21	32.3	65	16.6
Total	10	2.6	19	4.9	190	48.6	44	11.3	128	32.7	391	100.0

Chi-square = 29.45      D.F. = 20      Significance = 0.079

TABLE 40  
POSITION IN SCHOOL BY MOST EMPHASIZED GOALS  
(PIS X MEG)

	1		2		3		4		Total	
PIS	No	%	No	%	No	%	No	%	No	%
1	1	25	2	50	1	25	-	-	4	1.1
2	19	20.4	27	29	42	45.2	5	4.4	93	24.9
3	54	19.6	30	10.9	176	63.8	16	5.8	276	74.0
Total	74	19.8	59	15.8	219	58.7	21	5.6	373	100.0

Chi-square = 22.71    D.F. = 6    Significance = 0.0009

TABLE 41  
POSITION IN SCHOOL BY STUDENTS SUPPORT OF POLICY  
(PIS X SOPSTMW)

	1		2		3		Total	
PIS	No	%	No	%	No	%	No	%
1	-	-	4	100.0	-	-	4	1.2
2	7	9	37	47.4	34	43.6	78	23.6
3	120	48.2	88	35.3	41	16.5	249	75.2
Total	127	38.4	129	39.0	75	22.7	331	100.0

Chi-square = 51.66    D.F. = 4    Significance = 0.0000

TABLE 42  
POSITION IN SCHOOL BY PARENTS' SUPPORT OF POLICY  
(PIS X SOPPTMW)

	1		2		3		Total	
PIS	No	%	No	%	No	%	No	%
1	1	33.3	2	66.7	-	-	3	0.9
2	10	12.7	41	51.9	28	35.4	79	24.6
3	134	56.1	69	28.9	36	15.1	239	74.5
Total	145	45.2	112	34.9	64	19.9	321	100.0

Chi-square = 47.74    D.F. = 4    Significance = 0.0000

TABLE 43  
SEX BY AIMS OF SR/ACTIVITIES IN SCHOOL  
(SEX X AS)

	1		2		3		4		5		Total	
Sex	No	%	No	%	No	%	No	%	No	%	No	%
1	-	-	5	5.0	59	59.0	6	6.0	30	30.0	100	25.9
2	10	3.5	13	4.5	127	44.4	38	13.3	98	34.3	286	74.1
Total	10	2.6	18	4.7	186	48.2	44	11.4	128	33.2	386	100.0

Chi-square = 10.66    D.F. = 4    Significance = 0.0306

## **APPENDIX M**

## APPENDIX M

SUPERVISION AND IMPLEMENTATION STRUCTURE OF  
SELF-RELIANCE ACTIVITIES IN SCHOOLS

For the success of self-reliance activities, the following people and organizational bodies are to cooperate and be fully involved.

- A. Project Leader (Student)
- B. School Accountant/Bursar
- C. Self-reliance Committee of the School Council
- D. School Council
- E. Teachers' Council
- F. School Principal/Headmaster
- G. Regional/District Development Director
- H. School Board

A. Project Leader has the following duties.

- (a) To understand thoroughly the objectives and activities of the project as laid out by the school.
- (b) To accept and critique the report from the out-going leader of the same project.
- (c) To be fully conversant with the activities of the project.
- (d) To prepare and give the required reports on the project during his or her term of office.

B. School Accountant/Bursar

Whenever possible, the accounting of the project should be done by a student. The school bursar or accountant should advise and assist the student in bookkeeping. Duties pertaining to this office include receiving and banking project money, making all the necessary payments and preparing reports and financial statements regarding the project.

C. Self-reliance Committees

This one of the most important committees of the school council (Parliament).

(a) Members of the Committee:

- (i) Chairperson - school Headmaster
- (ii) Secretary - to be elected by members of the committee who are members of the school council.



- (iii) Teacher-Coordinator of sr-activities in the school.
- (iv) School Accountant/Bursar
- (v) More than five students or chairpersons of all projects in the school.

The committee may invite to its meetings non-members as will be necessitated by the agenda to be discussed.

(b) Duties of the Committee:

- (i) To specify the objectives of self-reliance projects in the particular school.
- (ii) To propose and plan self-reliance projects in school.
- (iii) To propose implementation procedures and oversee their execution.
- (iv) To review reports from leaders of various projects.
- (v) To assess performance in self-reliance projects and report to the school council.
- (vi) To advise the school council and the Headmaster about the best way of organizing sr-activities.

D. The School Council (Parliament)

Duties of the Council:

- (a) To discuss and ratify the plans for sr-projects presented by the sr-committees.
- (b) To discuss and pass estimates of income and expenditure of various sr-projects.
- (c) To receive and discuss various reports on sr-activities from sr-committee and the school accountant.

E. Teachers' Council

Duties of Teachers' Council

- (a) To advise the Headmaster pertaining to sr-activities.
- (b) To discuss and ratify plans for self-reliance projects in school.
- (c) To discuss and ratify proceeds from and expense of sr-activities.
- (d) To discuss and approve the procedures for teachers' participation in sr-activities.

F. Headmaster

The headmaster is the overall leader of all self-

reliance projects in the school. His/her duties are as follows.

- (a) To chair the self-reliance committee.
- (b) To oversee the implementation of the directives regarding self-reliance activities as approved by the teachers' council.
- (c) To receive and scrutinize reports from project leaders, sr-committee, school council and school accountant.
- (d) To ensure that the production target of sr-activities is achieved.
- (e) To approve expenditures on sr-activities as recommended by the school council and teachers' council.
- (f) To ensure that appropriate reports on sr-activities are sent to the concerned, such as, the Ministry of Education, Regional and District Development Directors.

#### G. Regional/District Development Director

Since sr-activities in schools are part of plans for economic development in the region/district, schools should coordinate their plans with those of the region/district in which they are situated. Since some of the Regions are ready to aid schools financially in their endeavor, it is advisable for the school to seek advice from and send relevant reports to regional district development directors.

#### H. School Board

The School Board has the right to be informed of sr-activities in the school and to discuss them from the planning stage, implementation and evaluation. According to the Education Act , Law No. 25 of 1978, school boards are thereby authorized to participate in advising and proposing sr-activities appropriate to the local conditions. Hence, schools are obliged to make available to the School Board plans and reports on sr-activities.

Source: Excerpts translated from: Ministry of Education, Directive on the Implementation of SR-activities in Schools and Colleges: Mwongozo Kuhusu Utekelezaji wa Kazi za Kuzalisha mali katika shule na vyuo, (Dar-es-salaam: Circular No. EDF. 1/100/7, 24 March 1980). pp. 3-9. (Mimeographed.)

## APPENDIX N

## APPENDIX N

TABLE 44

GROSS ENROLMENT RATIOS BY LEVEL OF EDUCATION:  
AFRICA AND DEVELOPED COUNTRIES

AFRICA:	First Level	Second Level	Third Level
1960	MF = 43.5 M = 55.4 F = 31.5	MF = 5.2 F = 7.4 F = 3.0	MF = 0.7 M = 1.2 F = 0.3
1985	MF = 84.3 M = 92.8 F = 75.7	MF = 33.0 M = 40.1 F = 25.8	MF = 4.3 M = 6.2 F = 2.4
DEVELOPED COUNTRIES:			
1960	MF = 101.5 M = 102.4 F = 100.6	MF = 62.1 M = 63.3 F = 60.9	MF = 13.3 M = 17.1 F = 9.4
1985	MF = 102.3 M = 102.7 F = 102.0	MF = 87.9 M = 86.8 F = 89.1	MF = 33.1 M = 33.9 F = 32.2

Source: UNESCO, Statistical Yearbook, 1986 (Printed in Belgium), p. II-31.

TABLE 45

## GROSS ENROLMENT RATIOS BY LEVEL OF EDUCATION: TANZANIA

	First Level	Second Level	Third Level
1975	MF = 53 M = 62 F = 44	MF = 3 M = 4 F = 2	MF = 0.2 M = 0.4 F = 0.1
1980	MF = 93 M = 100 F = 86	MF = 3 M = 4 F = 2	— — —
1981	MF = 94 M = 100 F = 88	MF = 3 M = 4 F = 2	MF = 0.4 M = 0.6 F = 0.1
1982	MF = 90 M = 94 F = 85	MF = 3 M = 4 F = 2	MF = 0.4 M = 0.6 F = 0.1
1983	MF = 87 M = 91 F = 84	MF = 3 M = 4 F = 2	MF = 0.4 M = 0.6 F = 0.1
1984	—	—	MF = 0.4 M = 0.6 F = 0.1

Source: UNESCO, Statistical Yearbook, 1986 (Printed in Belgium), p. III-32.

TABLE 46

## PUBLIC EXPENDITURE ON EDUCATION: TANZANIA

Total Expenditure on Education			
	Amount (in 000 Tsh.)	% GNP	% Total Gov't Expenditure
1975	1,029,100	5.4	17.8
1980	2,148,704	5.4	14.3
1981	2,226,205	5.00	15.1
1982	2,500,715	5.3	15.0
1983	2,843,585	5.8	15.3
Current Education Expenditure			
	Amount (in 000 Tsh.)	% GNP	% Current Gov't Expenditure
1975	827,800	4.4	22.5
1980	—	—	—
1981	1,858,175	4.2	—
1982	2,211,972	4.7	—
1983	2,480,200	5.1	—

Source: UNESCO, Statistical Yearbook, 1986 (Printed in Belgium), P. IV-8.

TABLE 47

## Summary of Statistics in Education 1981

Type of Institution	No. of Institutions	No. of Learners	No. of Teachers	Teacher Pupil Ratio
Primary (Public) ...	9,980	3,538,183	81,659	1:43
Secondary (Public) ...	85	35,983	2,054	1:19
Secondary (Private) ...	82	30,162	1,308	1:23
Adult Education Centres ...	9,928*	4,912,511	148,108	1:33
Folk Development Colleges (FDC) ...	52	13,964	276	1:51
Teacher's Colleges ...	36*	7,449	581	1:13
Distant Teaching Approach ...	20	1,542	n.a	n.a
Technical Colleges ...	2	1,357	163	1:8.3
University ...	1	3,357	893	1:4
(University East Africa and Abroad) ...	n.a	1,497	n.a	

Source: Ministry of National Education (Statistics Section)

+ MANTEP Bagamoyo is not included.

• These statistics are for 1982.

TABLE 48

## TANZANIA'S EDUCATION PYRAMID

1967a			1977a			1982b		
Education Level	Intake	Percent of Standard I Intake	Education Level	Intake	Percent of Standard I Intake	Education Level	Intake	Percent of Standard I Intake
University (First Year)	511	0.33	University (First Year)	894	0.16	University (First Year)	1,071	.16
Form V	895	0.57	Form V	2,120	0.39	Form V	2,121	.31
Form I	6,535	4.22	Form I	9,242	1.70	Form I	8,943	1.29
Standard VII	51,381	32.59	Standard VII	171,785	31.52	Standard VII	419,331	60.99
Standard I	157,196	-	Standard I	543,247	-	Standard I	637,481	-

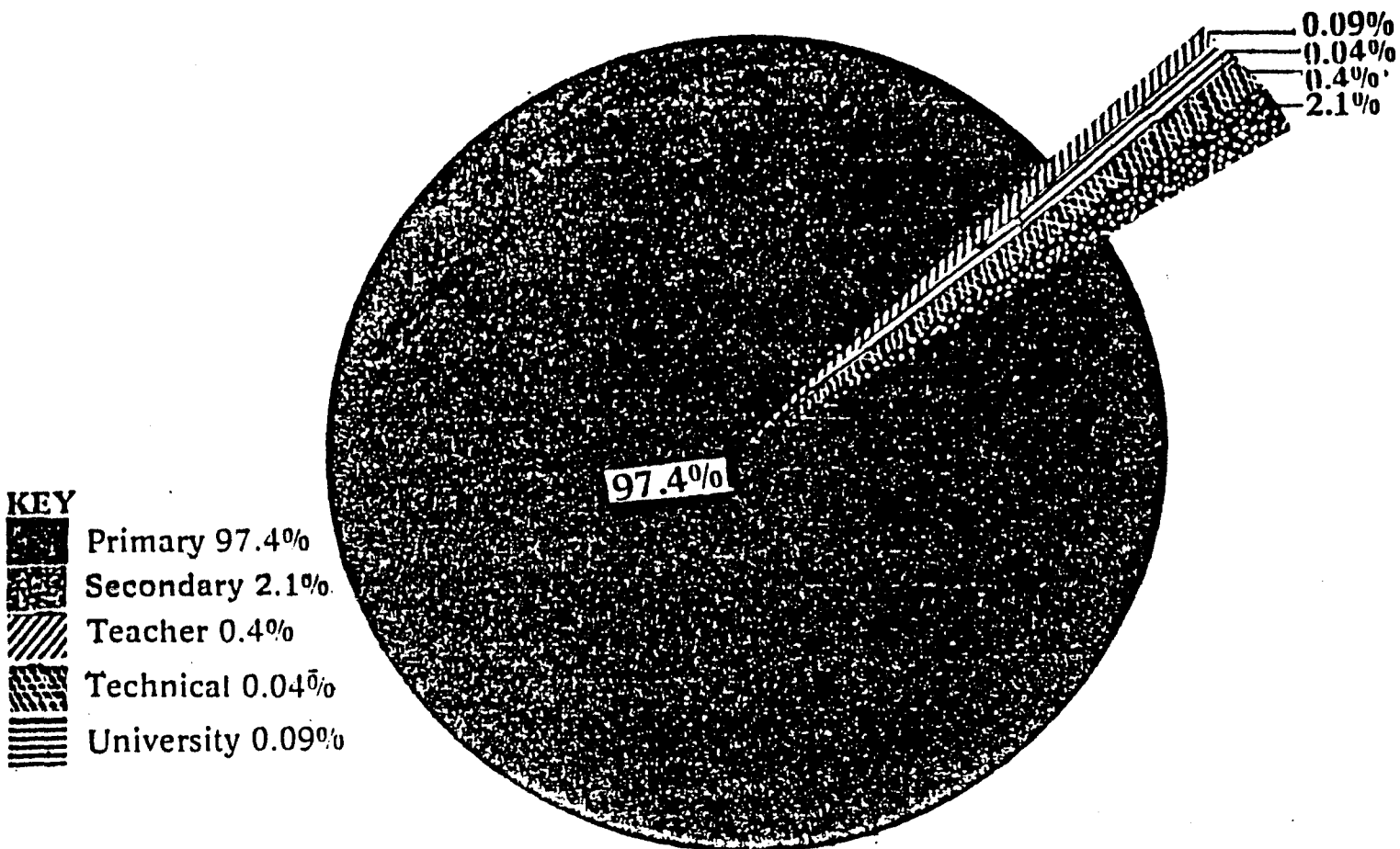
SOURCE: URT, 1973: 112; URT: 1984: 49

<sup>a</sup>United Republic of Tanzania. The Economic Survey, 1977-78 (Dar-es-Salaam: Government Printer, 1978), p. 112

<sup>b</sup>\_\_\_\_\_. Basic Facts About Education in Tanzania (Dar-es-Salaam: Ministry of Education, 1984), p.49

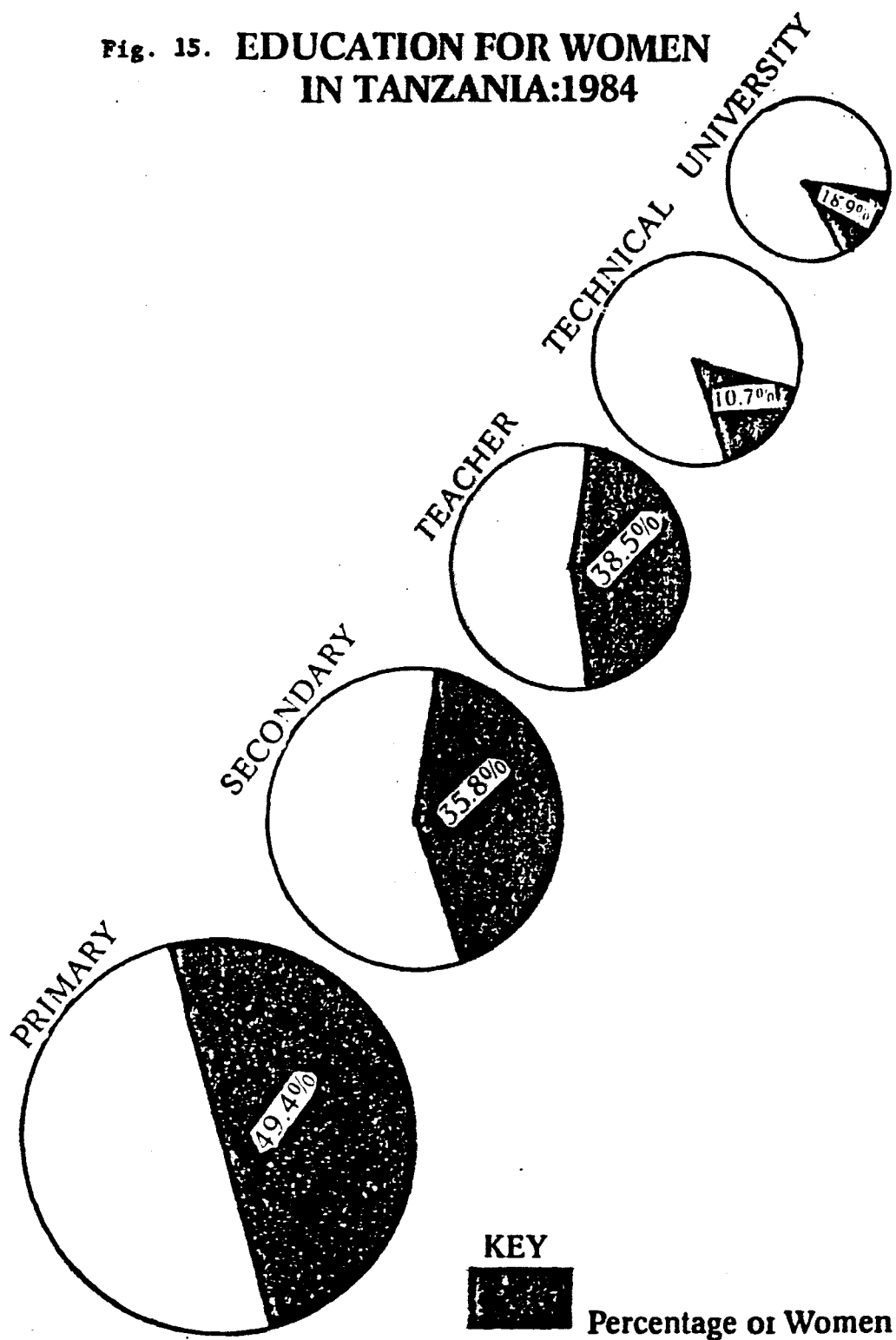


Fig. 14. TANZANIA EDUCATIONAL PIE: 1984



Source: URT, Basic Education Statistics 1980 - 1984  
(Dar es Salaam: June 1985), p. 32.

**Fig. 15. EDUCATION FOR WOMEN  
IN TANZANIA:1984**



Source: Ibid., p. 31.

TABLE 49

**EDUCATION FOR WOMEN**  
**WOMEN ENROLMENT AS A PERCENTAGE OF TOTAL**  
**ENROLMENT: 1980 - 1984**

EDUCATIONAL LEVEL	1980	1981	1982	1983	1984
<b>a) PRIMARY EDUC.</b>	%	%	%	%	%
Std. I	49.3	49.8	50.1	50.0	50.4
Std. VII	41.3	43.3	44.5	45.5	47.0
Std. I - VII	47.1	47.7	48.3	48.9	49.4
<b>a) SECONDARY EDUC.</b>					
Form I	35.1	35.7	36.8	36.9	38.3
Public	33.5	33.6	33.8	33.4	34.3
Private	37.3	38.3	40.1	40.9	42.5
Form IV	31.9	33.7	33.3	34.8	35.3
Public	29.7	31.3	31.1	32.2	32.8
Private	35.4	36.6	35.8	38.0	38.0
Form V	28.1	22.4	22.2	21.0	22.3
Public	23.4	23.1	22.7	21.7	22.1
Private	13.5	19.1	18.8	15.3	22.9
Form VI	24.0	22.3	23.2	22.2	20.9
Public	24.7	22.9	23.2	22.8	20.9
Private	15.7	14.3	24.3	16.6	21.3
Form I - VI	33.2	34.0	34.5	35.0	35.8
Public	31.1	31.9	31.7	31.9	32.2
Private	36.2	37.3	38.0	38.9	40.1
<b>c) TEACHER EDUC.</b>	48.1	42.4	36.7	37.9	38.5
<b>d) Technical Educ.</b> (Tech. Colleges)	6.4	10.0	10.9	10.7	10.7
<b>e) UNIVERSITY EDUC.</b> (Undergraduates)	21.3	24.0	21.2	19.6	18.9

Source: Ibid., 21.

**PRIMARY SCHOOL LEAVERS AND  
FORM ONE SELECTION 1961 - 1984**

YEAR	Std. VII/VIII Leavers	FORM I SELECTION			
		PUBLIC	%	PRIVATE	%
1961	11,732	4,196	35.8	-	-
1962	13,730	4,810	35.0	-	-
1963	17,042	4,972	29.2	-	-
1964	20,348	5,302	26.1	-	-
1965	29,367	5,942	20.2	458	1.6
1966	41,083	6,377	15.5	2,329	5.7
1967	47,981	6,635	13.8	2,591	5.4
1968	58,872	6,989	11.9	2,610	4.4
1969	60,545	7,149	11.8	2,511	4.2
1970	64,630	7,350	11.4	3,021	4.7
1971	70,922	7,780	11.0	3,254	4.6
1972	87,777	7,956	9.1	3,667	4.2
1973	106,203	8,165	7.7	4,379	4.1
1974	119,350	78,472	7.1	4,964	4.2
1975	137,559	8,680	6.3	5,114	3.7
1976	156,114	8,659	5.5	5,756	3.7
1977	169,106	8,706	5.1	6,590	4.0
1978	185,293	8,720	4.7	7,165	3.9
1979	193,612	8,908	4.6	8,467	4.4
1980	212,446	8,913	4.2	6,677	3.1
1981	357,816	9,178	2.6	7,095	2.0
1982	419,829	9,241	2.2	7,988	1.9
1983	454,604	9,899	2.2	8,469	1.9
1984	649,560	10,077	1.6	9,606	1.5

Source: Ibid., 7.

TABLE 51

## PRIMARY SCHOOL TRANSITION RATES: 1977 - 81

n) TRANSITION RATES:	1977	1978	1979	1980	1981
I-II: PR	98.98	94.79	95.18	94.66	91.95
PR	0.24	0.18	2.12	3.17	3.42
DR	0.78	5.03	2.70	2.17	4.63
II - III PR	98.86	95.57	92.56	95.77	93.19
RR	0.18	0.15	1.34	2.51	2.80
DR	0.96	4.28	6.10	1.72	4.01
III-IV:	98.08	95.72	93.99	94.28	94.05
RR	0.39	0.11	1.07	1.65	2.20
DR	1.53	4.17	4.94	4.07	3.75
IV-V: PR	98.12	94.36	96.04	96.92	92.28
RR	0.15	0.05	0.05	0.24	0.12
DR	1.73	5.59	3.91	2.84	7.60
V-VI:PR	97.21	93.44	97.10	96.90	97.26
RR	0.74	0.06	0.01	0.01	0.02
DR	2.05	6.50	2.89	3.09	2.72
VI-VII: PR	97.66	97.16	96.10	94.27	94.95
RR	0.69	0.03	0.01	0.01	0.01
DR	1.65	2.81	3.89	5.72	5.04

Note:— PR — Promotion Rate

RR — Repetition Rate

DR — Dropout Rate

Source: Ibid., p. 6.

TABLE 52

**SECONDARY EDUCATION**

**STATISTICS: 1980 — 1984**

	1980	1981	1982		1984
<b>(a) Total Enrolment: Form 1— VI</b>					
	67296	67602	69144	71219	74,208
% Increase		0.4	2.3	3.0	4.2
- Public	38830	38292	38982	39737	40617
% Increase		-1.4	1.8	1.9	2.2
- Private	28466	29310	30162	31482	33591
% Increase		3.0	2.9	4.4	6.7
<b>(b) Total Teaching Staff</b>					
	3194	3262	3362	3667	3935
% Increase		2.1	3.1	9.1	7.3
- Public	2121	2105	2054	2307	2438
% Increase		-0.8	-2.4	12.3	5.7
- Private	1073	1157	1308	1360	1497
% Increase		7.8	13.0	4.0	10.1
<b>(c) Total No. of Schools</b>					
	154	158	167	170	170
- Public	83	83	85	85	85
- Private	71	75	82	85	85
<b>(d) Teacher/Pupil Ratio</b>					
	1:21	1:21	1:21	1:19	1:19
- Public	1:18	1:18	1:19	1:17	1:17
- Private	1:26	1:25	1:23	1:23	1:22

Source: Ibid., pp. 8-9.

Fig. 16. STRUCTURE OF EDUCATION IN TANZANIA

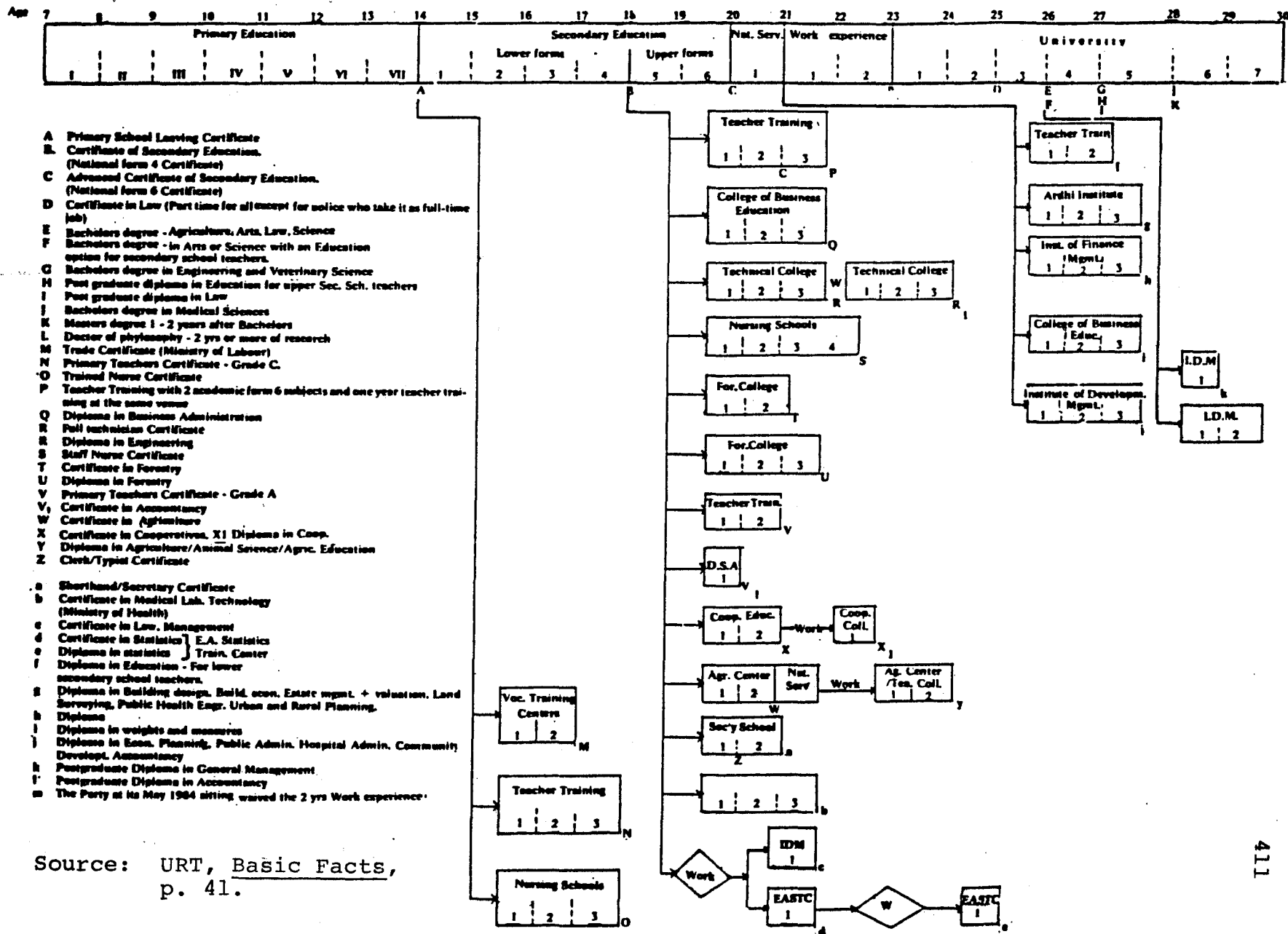
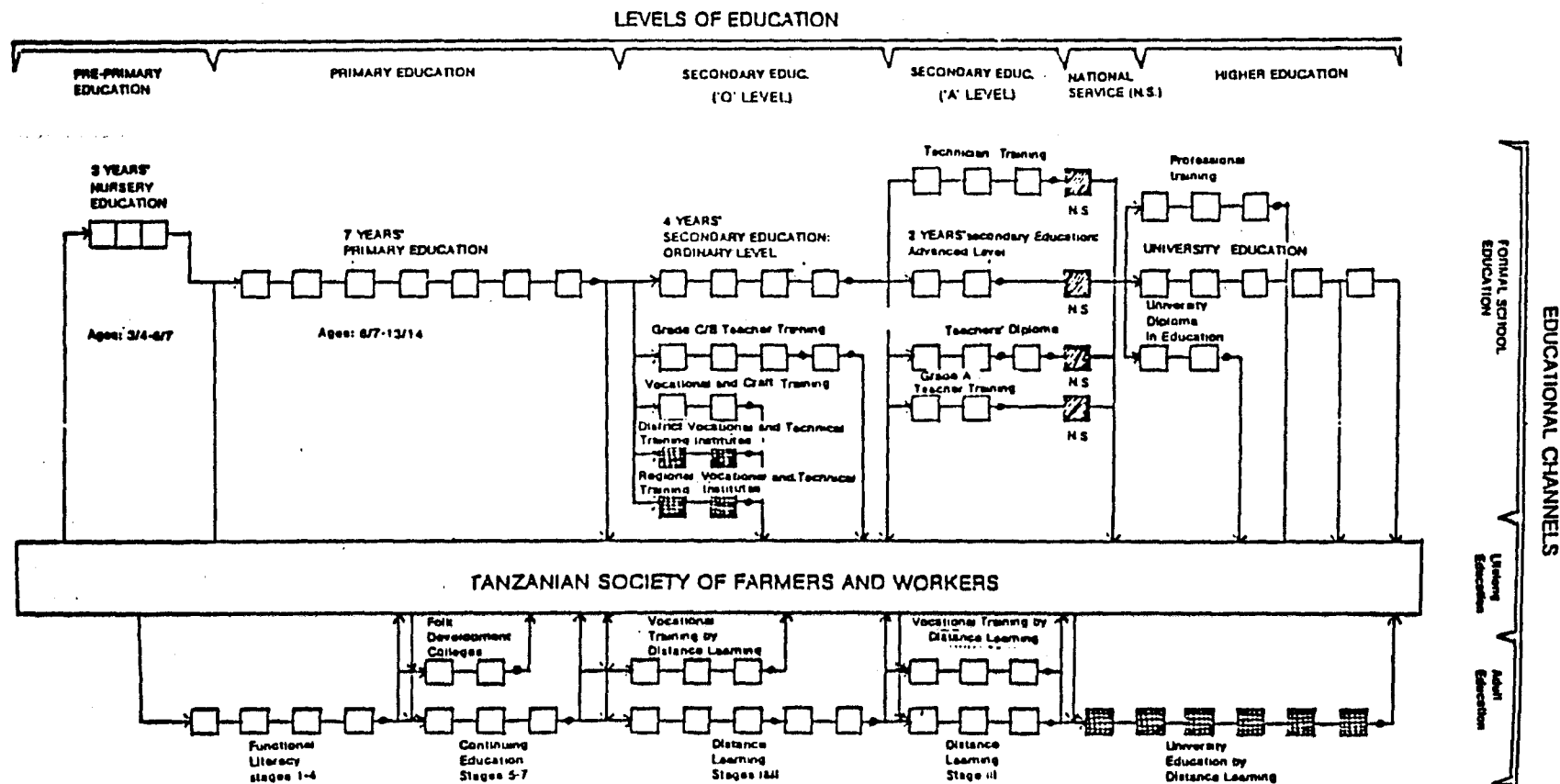


Fig. 17. STRUCTURE OF EDUCATION TOWARDS THE YEAR 2000



Source: URT, Educational System in Tanzania Towards the Year 2000 (Dar es salaam: Ministry of Education, 1984), p. 18.



## APPROVAL SHEET

The dissertation submitted by Peter M. Rutayongororwa has been read and approved by the following committee:

Steven I. Miller, Ph. D., Director  
Professor, Department of Educational Leadership and Policy  
Studies, Loyola

John M. Wozniak, Ph. D., Advisor  
Professor Emeritus, Department of Educational Leadership and  
Policy Studies, Loyola

Joan K. Smith, Ph. D.  
Associate Dean, Graduate School, Loyola  
Associate Professor, Department of Educational Leadership  
and Policy Studies, Loyola

Paul S. Breidenbach, Ph. D.  
Associate Professor, Department of Sociololgy/Anthropology,  
Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

November 23, 1987  
Date

Steven I. Miller  
Director's Signature